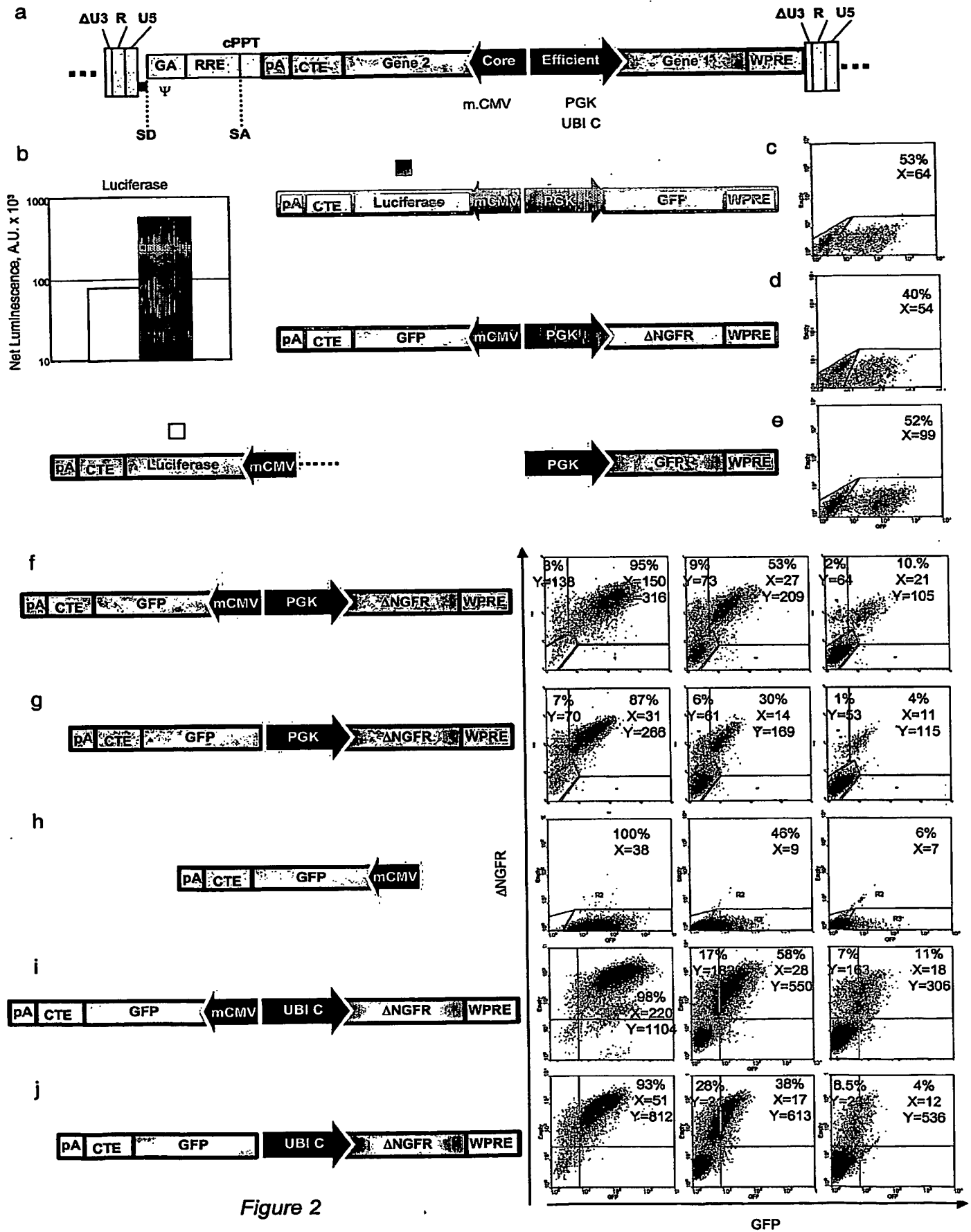


Figure 1



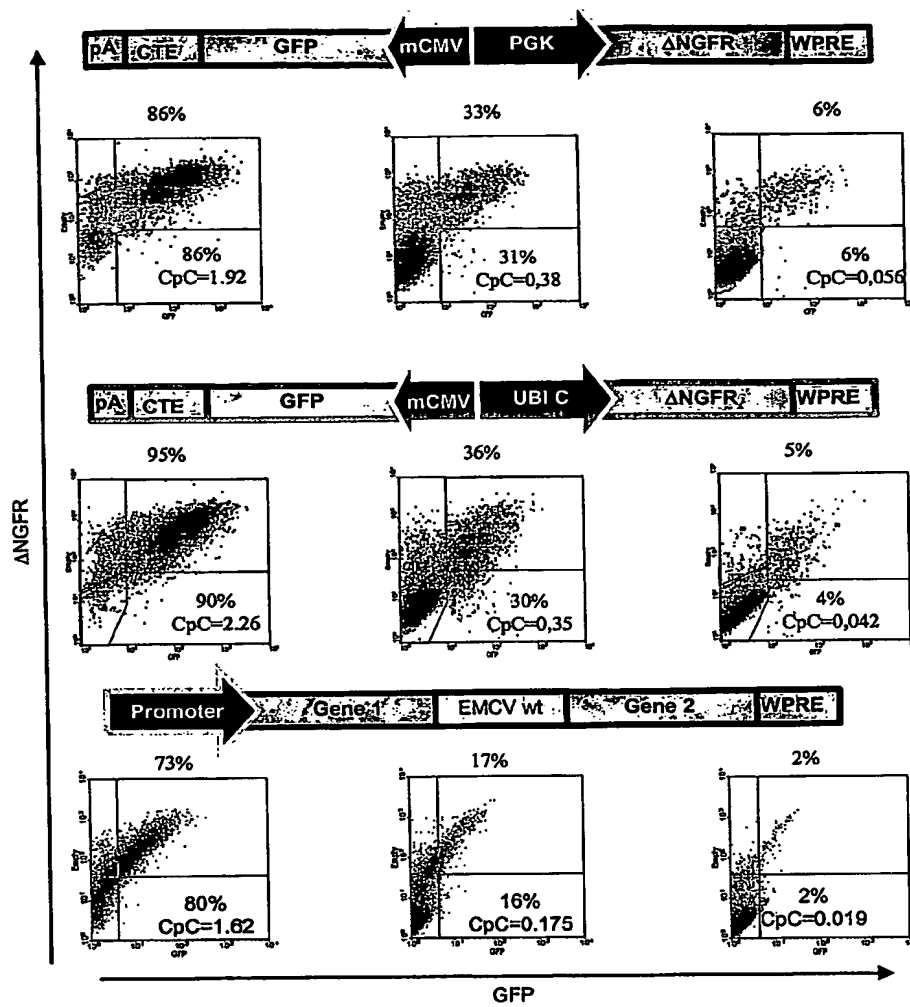


Figure 3

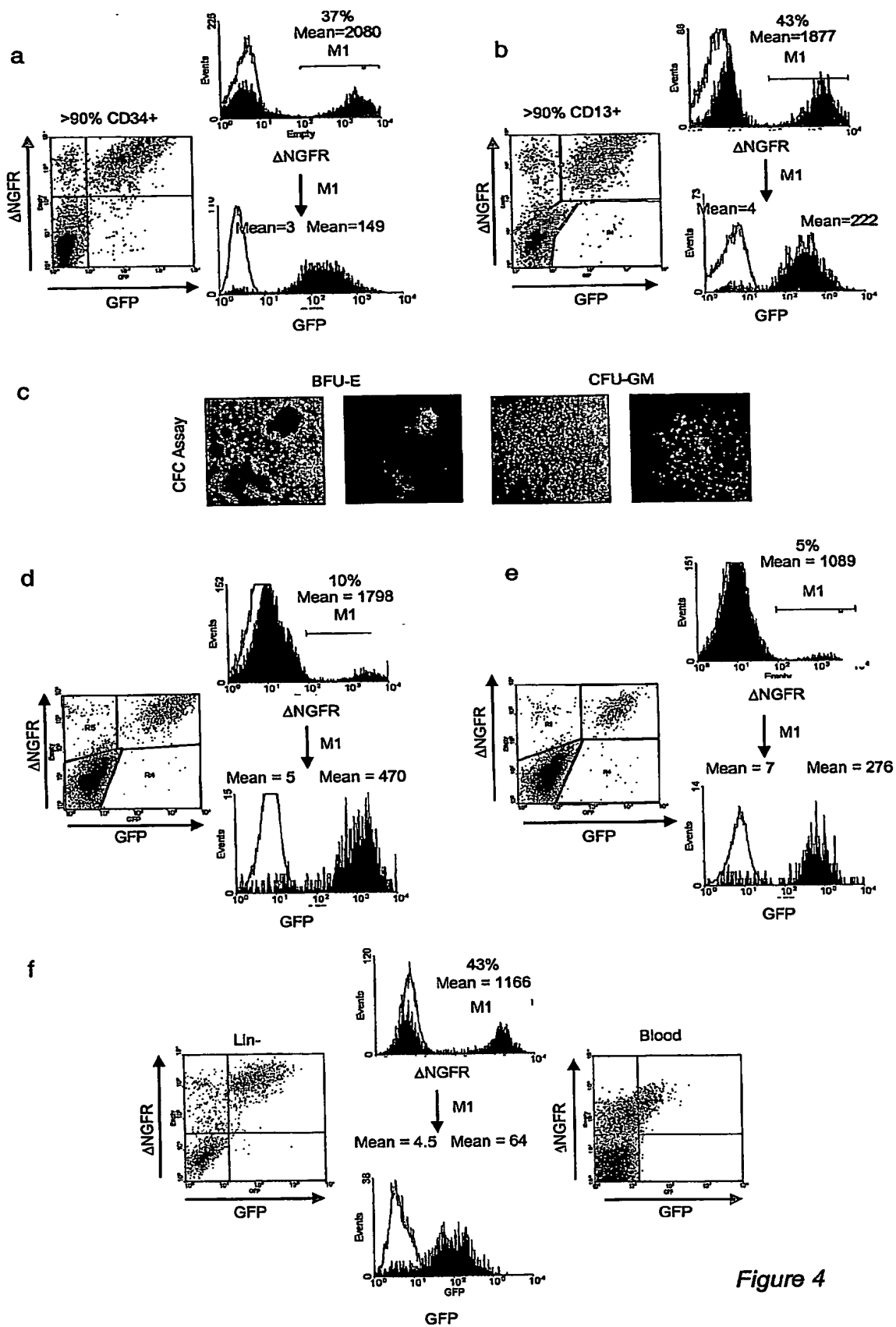


Figure 4

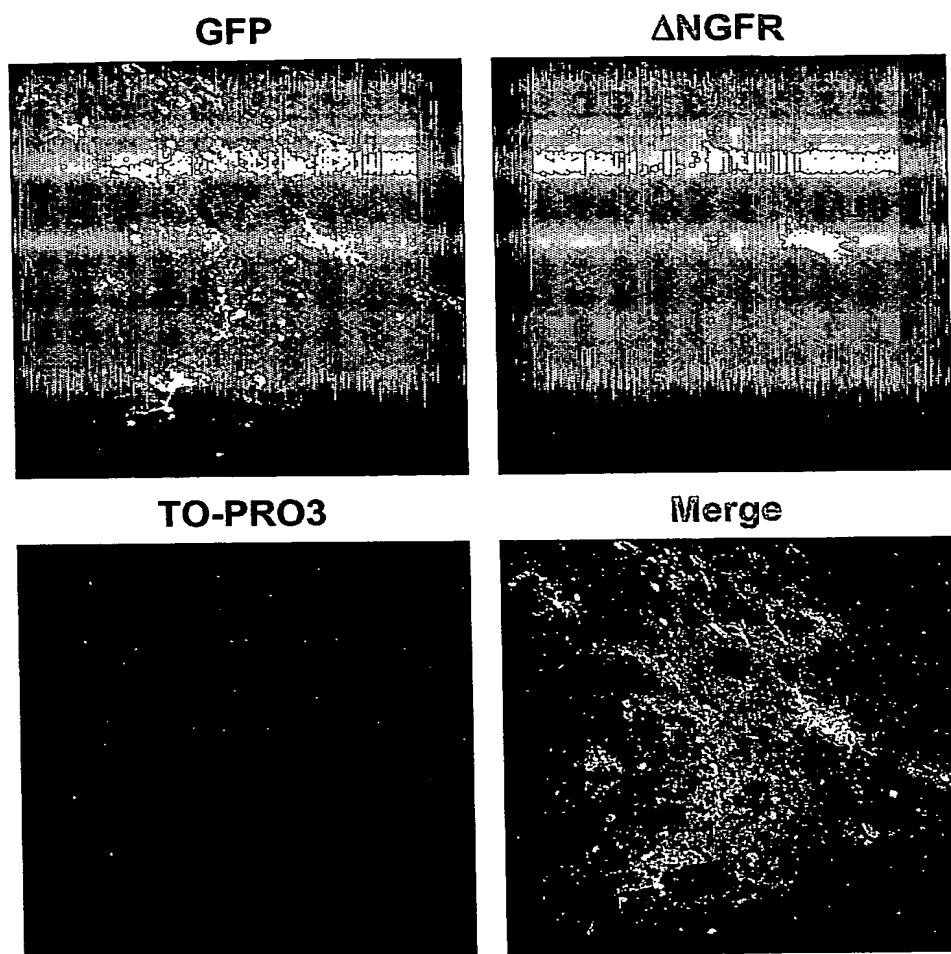


Figure 5

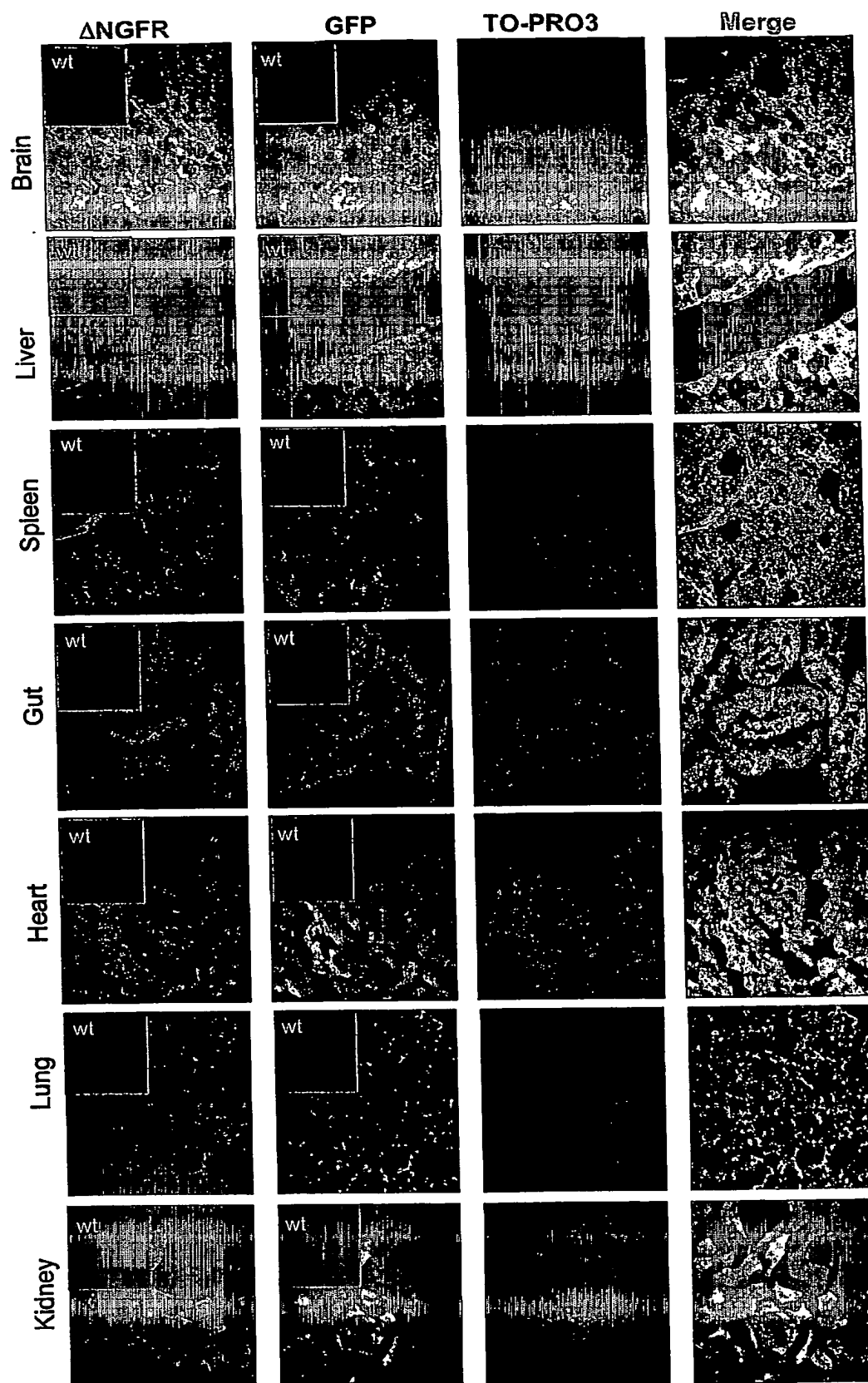


Figure 6

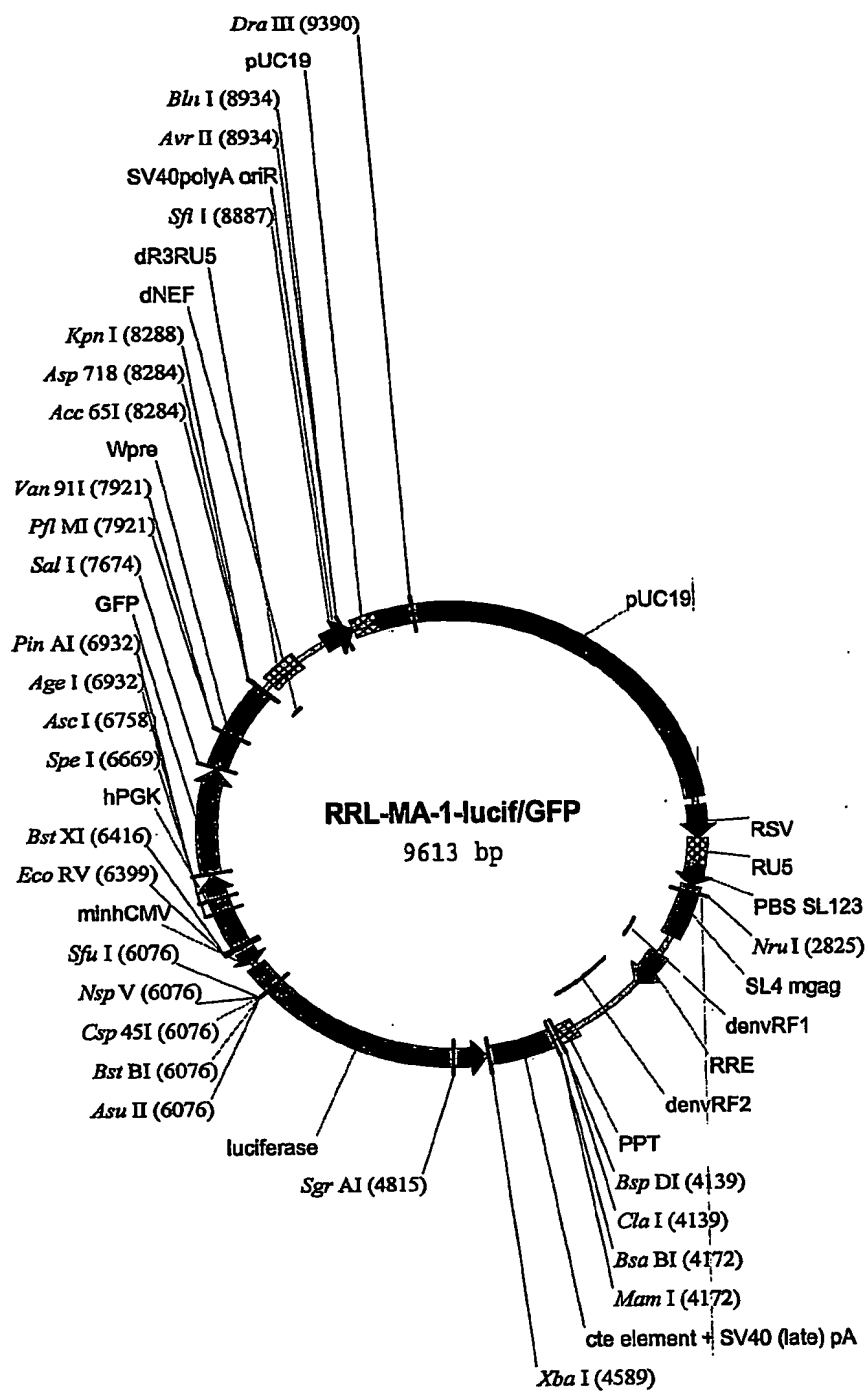


Fig 7a

Fig. 7b (1 of 3)

caggtggcacttttcggggaaatgtgcgcggaaccctatttgtttatttttctaatacattcaaatatgtatccgctcatgaga
caataaccctgataaatgcttcaataatattgaaaaaggaagagtagtattcaacatttccgtgtcggccttattcccttttt
gcggcattttgccttcctgttttctcaccagaaacgctggtaagtaaaagatgctgaagatcagttgggtgcacgagt
gggttacatgaactggatctcaacagcggtaagatccttgagagtttcccccgaagaacgtttccaatgatgagcacttt
taaagttctgctatgtggcgcggtattatcccgtattgacggcggaagcaactcggcgcgcacatacactattctcaga
atgacttgggtgagtactcaccagtcacagaaaagcatcttaccggatggcatgacagtaagagaattatgcagtgtgccat
aaccatgagtataaactgcggccaacttacttctgacaacgatcggaggaccgaaggagctaaccgctttttgcacaac
atgggggatcatgtaactcgccttgatcgttgggaaccggagctgaatgaagccataccaaacgacgagcgtgacaccac
gatgcctgtagcaatggcaacaacgttgcgcaactattaactggcgaactacttactctagcttccggcaacaattaatag
actggatggaggcggaataaagttgcaggaccacttctgcgtcggccttccggctggctgtgttattgtgataaatctgg
agccgggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggaagccctcccgatcgtagtattctacac
gacggggagtcaggcaactatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcattgtaact
gtcagaccaagtttactcatatatacttttagattgatttaaaacttcattttaatttaaaaggaatcaggtgaagatccttttgata
atctcatgacaaaatcccttaacgtgagtttcttccactgagcgtcagaccccgtagaaaagatcaaggatcttcttgag
atccttttttctgcgcgtaacttctgctgttgcacaacaaaaaaccaccgctaccagcgggtggttgttggcggatcaagagct
accaactcttttccgaaggttaactggcttcagcagagcgcagataccaaatactgtccttctagttagccgtagttaggcc
accacttcaagaactctgtagcaccgcctacatacctcgtctgttaactctgttaccagtggctgtgccagtggcgataag
tcgtgtcttaccgggttgactcaagacgatagttaccggataaggcgcagcggctgggctgaacgggggggtcgtgcac
acagcccagcttgagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcggcagcgttccc
gaaggggagaaaggcggacaggtatccggtaagcggcagggctggaacaggagagcgcacgaggggagcttccaggg
ggaaacgcctggatctttatagtcctgtcgggttccgacacctgacttgagcgtcgtgattttgtgatgctcgtcagggggg
cggagcctatggaaaaacgccagcaacgcggccttttacgggtcctggcctttgttggcctttgtctacatgttcttctg
cgttatccctgattctgtggataaccgtattaccgcctttgagtgtgagctgataccgctcggcgcagccgaacgaccgagcg
cagcgagtcagtgagcggaggaagcgggaagagcgcccaatacgcaaacgcctctccccgcgcgttggccgattcattaa
tgcagctggcacgacaggttcccgactggaaagcgggcagtgagcgcaacgcaattaatgtgagttagctcactcattag
gcaccccaggctttacactttatgcttccggctcgtatgtgtgtggaattgtgagcggataacaatttcacacaggaaacagc
tatgacatgattacgccaagcgcgcaattaaccctactaaagggaacaaaagctggagctgcaagcttaatgtagtctta
tgcaatactctttagtcttgcaacatggttaacgatgagttgaacatgccttacaaggagagaaaaagcaccgtgcatgc
cgattggtggaagtaaggtggtacgatcgtgccttattaggaaggcaacagacgggtctgacatggattggacgaaccact
gaattgccgattgcagagatattgtatttaagtgcctagctcgatacaataaacgggtctctctgtttagaccagatctgagc
ctgggagctctctggctaactaggaacccactgcttaagcctcaataaagcttgccttgagtgttcaagtgtgtgtccc
gtctgtgtgtgactctggtaactagagatccctcagaccccttttagtcagtgtggaaaatctctagcagtgggcggccgaaca
gggacctgaaagcgaaagggaaccagagctctctcagcgcaggactcggcttgcgaagcgcgcacggcaagaggc
gagggggcggcgactggtgagtacgcaaaaaatttgactagcggaggctagaaggagagagatgggtgagagcgtc
agtattaaagcgggggagaattagatcgcgatgggaaaaaattcggtaaggccaggggggaaagaaaaaataaataaa
acatatagtatgggcaagcaggagctagaacgattcgcagttaatctggcctgttagaaacatcagaaggctgtagaca
aatactgggacagctacaaccatccctcagacaggatcagaagaacttagatcattatataatacagtagcaaccctctatt
gtgtgcatcaaggatagagataaaagacaccaaggaagctttagacaagatagaggaaagagcaaaacaaaagtaagac
caccgcacagcaagcggccgctgatcttcagacctggaggaggagatatgagggaacattggagaagtgaattatataaa
tataaagtagtaaaaattgaaccattaggagtagcaccaccaaggcaagagaagagtggtgcagagagaaaaagag
cagtggggaataggagcttgttcttgggttcttgggagcagcaggaagcactatgggcgcagcctcaatgacgtgacgg
tacaggccagacaattattgtctggtatagtgcagcagcagaacaatttgcgtgagggctattgaggcgcaacagcatctgtt
gcaactcacagctctggggcatcaagcagctccaggcaagaatcctggctgtggaaagatacctaaggatcaacagctcc
tggggatttgggggtgctctggaaaactcatttgcaccactgctgtgccttggatgctagtgttgagtaataatctctggaac
agatttggaaatcacacgacctggatggagtgggacagagaaattaacaattacacaagcttaatacactccttaattgaaga
atcgcaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtttgggaattgtttaaataaa
caaattggctgtggtatataaaattattcataatgatagtaggagccttggtaggttaagaataagttttgtgtactttctatagt
gaatagagttaggcagggatattcaccattatcgttcagacccacctcccaaccccgaggggacccgacaggcccgaag

Fig. 7b (2of 3)

gaatagaagaagaagggtggagagagagacagagacagatccattcgattagtgaacggatctcgacggatcggttaact
tttaaaagaaaaggggggattggggggtacagtgacgggggaaagaatagtagacataatagcaacagacatacaaaacta
aagaattacaaaaacaattacaaaaattcaaaattttatcgatcacgagactagcctcgagagatctgatcataatcagccat
accacatttgtagaggtttacttgctttaaaaaacctcccacacctccccctgaacctgaaacataaaatgaatgcaattgttg
ttgtaactgtttattgcagcttataatggttacaaataaggcaatagcatcacaatttcacaaataaggcattttttactgca
ttctagtttgggttgcctaaactcatcaatgtatcttatcatgtctggatctcaaatccctcggaagctgcgcctgtcttaggttg
agtatacatctttatcacttttaccgtcttggattagcagtagctctgacggccctcctgtcttaggttagtgaaaaatgtca
ctctcttaccgtcattggctgtccagcttagctcgcaggggaggtggtctggatcctctagaattacacggcgatcttccgc
ccttcttggcctttatgaggatctctctgattttcttgcctcgagtttccggaagaccttccggtacttctgccacaaacacaa
ctcctccgcgcaacttttgcggttacttgactggccacgtaatccacgatctcttttccgtcatcgtcttccgtgtcca
aaacaacaacggcggcgggaagttcaccggcgtcatcgtcgggaagacctgcgacacctgcgtcgaagatgttggggt
gttgagcaagatggattccaattcagcgggagccacctgatagcctttgtacttaatcagagacctcagggcggtcaacgat
gaagaagtgtctgtcttccagtaagctatgtctccagaatgtagccatccatcctgtcaatcaaggcgttggctcgttc
cggattgtttacataaccggacataatcataggacctctcacacacagttcgcctctttgattaacgccagcgtttcccggt
tccagatccacaaccttgcctcaaaaaatggaacaactttaccgaccgcccgggttatcatccccctcgggtgtaacag
aatagctgatgtatcagtgagcccatatccttgctgatacctggcagatggaacctcttggcaaccgctccccgactt
ccttagagaggggagcgcaccagaagcaatttctgtaaattagataaatcgtattgtcaatcagagtgtcttggcgaag
aaggagaatagggttggcaccagcagcgcactttgaatctgtaatcctgaaggctcctcagaaacagctcttcttcaaatct
atacattaagacgactcgaatccacatatcaaatatccgagtgtagtaaacattccaaaaccgtgatggaatggaacaaca
cttaaaatcgagtatccggaatgatttgattgccaaaaataggatctctggcatgcgagaatctcacgcaggcagttctatg
aggcagagcgcacaccttaggcagaccagtagatccagaggagttcatgatcagtaattgtcttgcctatcgaagga
ctctggcacaataatgtattcattaaaaccgggaggtagatgagatgtgacgaacgtgtacatcgactgaaatccctggtaa
tccgttttagaatccatgataataatttttggatgattgggagctttttgcacgttcaaaatttttgaacccttttggaaacg
aacaccacggtaggtgcgaaatgccatactgttgagcaattcacgttcattataaatgtcgttcgcccggcgaactgcaa
ctccgataaataacgcgccaacaccggcataaagaattgaagagagttttactgcatacagcattctgtgatttatttca
gcccatatcgtttcatagcttctgccaaccgaacggacatttgaagtactcagcgtatgtatgtccacctcgatatgtcat
ctgtaaaagcaattgttcagggaaccaggggcgtatctcttcatagccttatgcagttgtcttccagcggttccatcttccagcg
gatagaatggcggcggccttcttattgttttggcgtcttccatgggtgaattccgcggaggctggatcggtcccgggtgtcttc
tatggaggtcaaaacagcgtggatggcgtctccaggcgatctgacggttcaactaaacgagctctgttatataggcctccca
ccgtacacgcctaccctcgagaagcttgatatgaattcccacgggggttggggttgcgcttttcaaggcagccctgggtt
tgcgcaggggacgcggctgtcttgggcgtggttccgggaacgcagcggcgccgacctgggtctcgcacattcttcacg
tccgttcgacggtcaccggatcttcgccgtacccttggggccccccggcgacgcttctgtccgcccttaagtcgg
gaaggttcttgcggttcgcccgtgcccggacgtgacaaacggaagccgcacgtctcactagtaccctcgagacggac
agcggcaggggagcaatggcagcgcgccgaccgcgatgggtgtggccaatagcggctgtcagcggggcgccgga
gagcagcggccgggaagggcggtgcgggaggggggtgtggggcggtagtgtggccctgttctgtccgcgcgg
tgttccgacttctgcaagcctccggagcgcacgtcggcagtcggctcctcgttgaccgaatcaccgacctctctcccag
ggggatccaccggctgccaccatgggtgagcaagggcgaggagctgttcaccggggtggtgccatcctgtgagctg
gacggcgacgtaaacggccacaagttcagcgtgtccggcgaggggcgaggggcgatgccacctacggcaagctgacct
gaagttcatctgcaccaccggcaagctgcccgtgccttggccaccctcgtgaccacctgacctacggcgtgcagtgtt
cagccgtaccctgaccacatgaagcagcagacttcttcaagtccgccatgcccgaaggctacgtccaggagcgcacc
atcttcttcaaggacgacggcaactacaagacccgcgccgaggtgaagttcagggcgacacctggtgaaccgcatcg
agctgaagggtcatcgacttcaaggaggacggcaacatcctggggcacaagctggagtacaactacaacagccacaacg
tctatatcatggccgacaagcagaagaaacggcatcaaggtgaacttcaagatccgccacaacatcgaggacggcagcgt
gcagctcggcaccactaccagcagaacacccccatcgccgacggccccgtgctgctgcccgacaaccactacctgag
caccagtcggcctgagcaaaagacccaacgagaagcgcgatcatggtcctgctggagtctgtgaccggcgccgg
gatcactctggcatggacgagctgtacaagtaaagcggccgcgtcgacaatcaacctctggattacaaaatttgaag
attgactggatttctaactatgttgccttttacgtatgtggatagctgtttaatgcctttgtatcatgctattgctcccgtat
ggcttcaattttctcctcctgtataaatcctggttgcgtcttctttagaggagttgtggccggtgtcaggcaacctggcgtggt

Fig. 7b (3 of 3)

gtgcactgtgttgctgacgcaacccccactgggtggggcattgccaccacctgtcagctccttcggggactttcgctttccc
cctccctattgccacggcggaactcatcgccgcctgccttgcgcgtgtggacaggggctcggctgttgggcactgaca
attccgtggtgttgctgggggaagctgacgtcctttccatggctgctgcctgtgttggcacctggattctgcgcgggacgtcc
ttctgtactgtcccttcggccctcaatccagcggaccttccctccgcggcctgtgcggcctctccgcgtctt
cgccttcgccctcagacgagtcggatctcccttggggccgcctccccgcctggaattcgagctcgggtacctttaagaccaat
gacttacaaggcagctgtagatcttagccactttttaaagaaaaggggggactggaagggttaattcactcccaacgaag
acaagatctgcttttgcttgactgggtctctctggtagaccagatctgagcctgggagctctctggtaactagggaaacc
actgcttaagcctcaataaagcttgccttgagtgtcaagtagtgtgtgccgtctgtgtgtgactctggtaactagagatcc
ctcagacccttttagtcagtgtggaaaatctctagcagtagtagttcatgtcatcttattttagtattataacttgcaagaaat
gaatatcagagagtgaagggaacttgttattgcagcttataatggttacaaataaagcaatagcatcacaaatttcacaaata
aagcattttttcactgcattctagttgtgtgttgcacaaactcatcaatgtatcttatcatgtctggctctagctatcccggccctaa
ctccggccagttccgccattctccgccccatggctgactaatttttttattatgcagaaggccgaggccgcctcggcctctg
agctattccagaagtagtgaggaggctttttggaggcctaggcttttgcgtcgagacgtacccaattcgcctatagtga
cgtattacgcgcgtcactggccgtcgtttacaacgtcgtgactgggaaaaccctggcgttacccaacttaatgccttgca
gcacatccccctttcgccagctggcgttaatagcgaaggagccgcaccgatcgcccttcccaacagttgcgcagcctgaa
tggcgaatggcgcgacgcgccctgtagcggcgcatgaagcgcggcggtgtggtgttacgcgcagcgtgaccgtac
acttgccagcgccctagcggcgctccttcgcttcttcccttcccttctcggcacgttcggcggctttccccgtcaagctta
aatcgggggctcccttaggggtccgatttagtctttacggcacctcgacccaaaaaacttgattaggggtgatggtcacgt
agtgggccatcgccctgatagacggttttcggccttgacgttggagtcacgttctttaaagtggactcttgttccaaactg
gaacaacactcaaccctatctcggctattcttttgattataagggtttgccgattcggcctattgggttaaaaaatgagctga
tttaacaaaaatttaacgcgaattttaacaaaatattaacggttacaaatttc

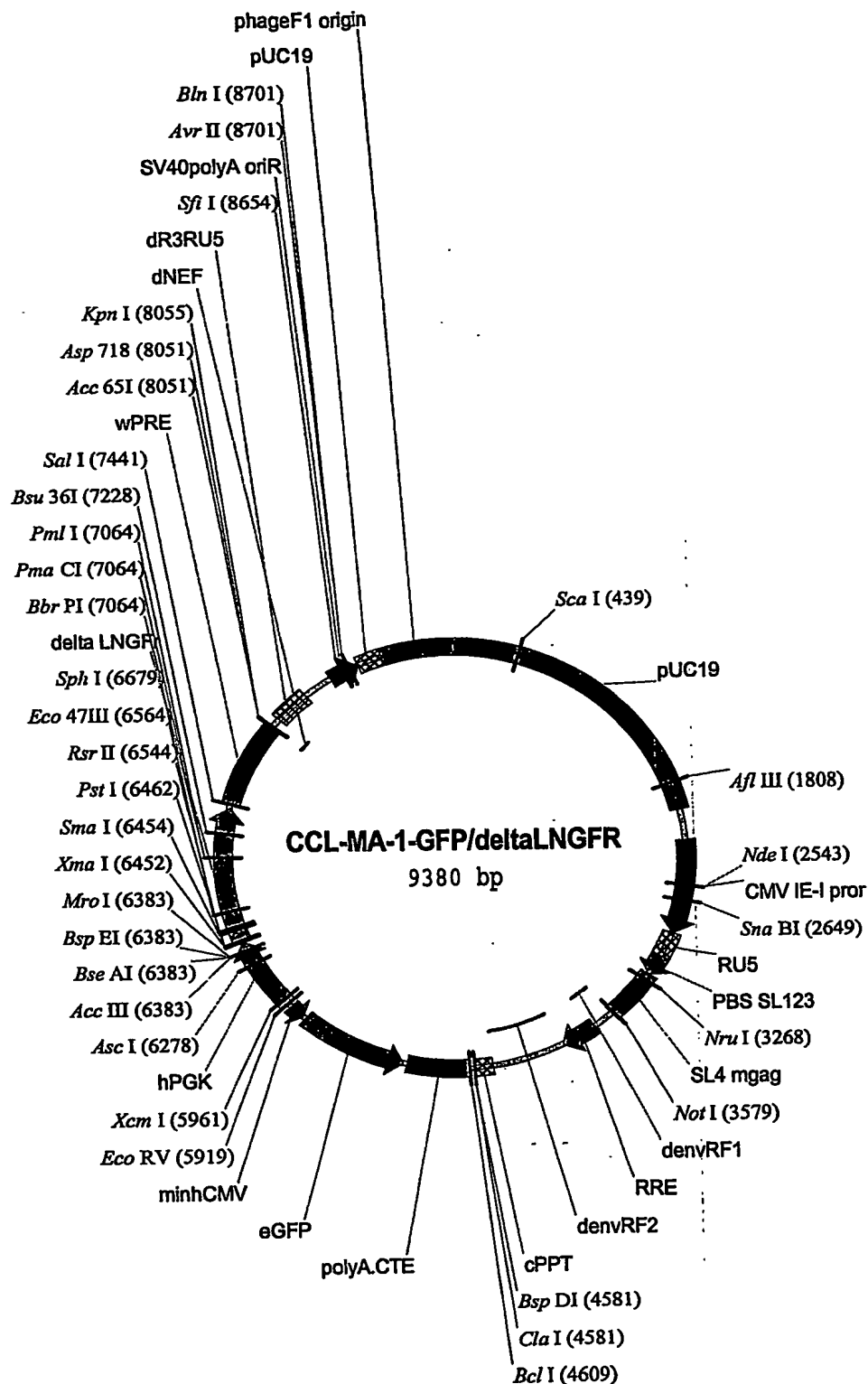


Fig. 8a

Fig. 8b (1 of 3)

cagggtggcacttttcggggaaafgtgcgcggaacccctatttgtttatcttaatacattcaaatatgtatccgctcatgaga
caataaccctgataaatgcttcaataatattgaaaaaggaagagtatgagtattcaacattccgtgctgcccttattcccttttt
gcggtcattttgcttctgttttctcaccagaaacgctggtgaaagtaaaagatgctgaagatcagttgggtgcacgagt
gggttacatcgaactggatctcaacagcggttaagatccttgagagtttcccccgaagaacgtttccaatgatgagcattt
taaagtctgctatgtggcgcggtattatcccgtattgacggcggaagagcaactcggcgcgcatacactattctcaga
atgacttgggtgagtactcaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgtgcat
aaccatgagtataactgcggccaacttactctgacaacgaicggaggaccgaaggagctaaccgctttttgcacaac
atgggggatcatgtaactgccttgatcgttgggaaccggagctgaatgaagccataccaaacgacgagcgtgacaccac
gatgcctgtagcaatggcaacaacgttgcgcaaaactattaactggcgaactacttactctagcttccggcaacaattaatag
actggatggaggggataaagttgcaggaccacttctgcgctcggccctccggctggctggttattgctgataaatctgg
agccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggaagccctcccgatcgtagtattctacac
gacggggagtcaggcaactatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcattgtaact
gtcagaccaagttactcatatatacttttagattgatttaaaacttcattttaatttaaaaggatctaggtgaagatccttttgata
atctcatgacaaaaatcccttaacgtgagtttctgctcactgagcgtcagaccccgtagaaaagatcaaaggatcttctgag
atccttttttctgcgctaactgtgctgtgcaaaaaaaaccaccgctaccagcgggtggttgttccggatcaagagct
accaactcttttccgaaggttaactggcttcagcagagcgcagataccaaactgtccttctagttagccgtagttaggcc
accacttcaagaactctgtagcaccgcctacatacctcgtctgtatacctgttaccagtggtgctgctccagtggtgataag
tcgtgtcttaccgggttgactcaagacgatgttaccggataagggcgagcgggtcgggctgaacgggggggttcgtgcac
acagcccagcttggagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcggcaccgcttccc
gaaggggagaaaggcggacaggtatccggtaagcggcgaggggtcggaaacaggagagcgcacgagggagcttccaggg
ggaaacgcctggtatctttatagtcctgtcgggttccgccacctctgacttgagcgtcgtttttgtgatgctcgcagggggg
cggagcctatggaaaaacgccagcaacgcggcctttttacggttctggcctttgtggtcctttgtccacatgttcttctg
cgttatccctgtattctgtggataaccgtattaccgctttgagtgcgtgataccgctcgcgcagccgaacgaccgagcg
cagcgagtcagtgagcaggaagcgggaagagcgccaatacgaaccgcctctccccgcggttggcgattcattaa
tgacgtggcgacgacaggttcccactggaaagcgggcagtgagcgaacgaattaatgtgagttagctcactcattag
gcaccccaggctttacactttatgcttccggctcgtatgtgtgtggaattgtgagcggataacaattcacacaggaacagc
tatgaccatgattacgcaagcgcgcaattaaccctcactaaagggaacaaaagctggagctgcaagcttggccattgcat
acgttgatccatacataatgtacatttatattggctcatgtccaacattaccgcatgttgacattgattattgactagtta
atagtaatacattacgggtcattagttcatagcccatataggagtccgcgttacataacttacggtaaatggccgcttg
ctgaccgccaacgacccccgccattgacgtcaataatgacgtatgttccatagtaacgccaatagggactttccattga
cgtcaatgggtggagtatttacggtaaacgccacttggcagtagcatcaagtgtatcatatgccaagtacggccctattga
cgtcaatgacggtaaatggccgctggcattatgccagtagcatgaccttatgggactttcctacttggcagtagcatctacgt
attagtcacgctattaccatggtgatcgggttggcagtagcatcaatgggcgtggatagcgggttgactcacggggattcc
aagtctccacccattgacgtcaatgggagtttgtttggcaccaaaatcaacgggactttccaaaatgtcgtacaactccg
ccccattgacgcaaatgggcggttaggcgtgtacgggtgggaggtctatataagcagagctcgttagtgaaacggggtctct
ctggttagaccagatctgagcctgggagctctctggctaactaggaacccactgcttaagcctcaataaagcttgcctga
gtgcttcaagtagtgtgtcccgtctgtgtgtgactctgtaactagagatccctcagacccttttagtcagtgtgaaaaatct
ctagcagtggtgcccgaacagggacctgaaagcgaaagggaaccagagctctcgcagcagggactcggcttctga
agcgcgcacgggcaagaggcgagggggcgcgactggtgagtacgcaaaaaatttgactagcggaggctagaaggaga
gagatgggtgcgagagcgtcagtattaagcgggggagaattagatcgcgatgggaaaaaatcggtaaggccagggggg
aaagaaaaaataataaataaataatagtagtggaagcagggagctagaacgattcgcagttaatcctggcctgttagaa
acatcagaaggctgtagacaaatactgggacagctacaaccatccctcagacaggaatcagaagaacttagatcattatata
atacagtagcaaccctctattgtgtgcatcaaggatagagataaaagacaccaaggaagcttagacaagatagaggaag
agcaaaaacaaaagtaagaccaccgcacagcaagcgccgctgatcttcagacctggaggaggagatagagggaacat
tgagagaagtgaattatataaataaagtagtaaaaattgaaccattaggagtagcaccaccaagggaagagaagagtg
gtgcagagagaaaaaagagcagtggaataggagcttggcttgggttcttgggagcagcaggaagcactatgggcgc
agcctcaatgacgctgacggtacaggccagacaattattgtctggtatagtgcagcagcagaacaatttctgagggctatt

Fig. 8b (2 of 3)

gaggcgcaacagcatctgttgaactcacagctctggggcatcaagcagctccaggcaagaatcctggctgtggaagata
cctaaaggatcaacagctcctggggatttgggggtgctctggaaaactcatttgcaccactgctgtgccttggaatgctagttg
gagtaataaatctctggaacagattggaatcacacgacctggatggagtgaggacagagaaattaacaattacacaagctta
atacactccttaattgaagaatcgaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagttt
gtggaattggttaacataacaaattggctgtggtatataaaattattcataatgatagtaggaggcttggtaggttaagaatag
ttttgctgtactttctatagtgaatagagtttaggcagggatattcaccattatcgttcagaccacctcccaccccaggggg
acccgacaggcccggaaggaatagaagaagaaggtggagagagagacagagacagatccattcgattagtgaacggatc
tcgacggatcgcgttaacttttaaaagaaaaggggggattgggggggtacagtgcaggggaaagaatagtagacataatg
caacagacatacaaaactaaagaattacaaaaacaaattacaaaaattcaaaattttatcgatcacgagactagcctcgagag
atctgatcataatcagccataccacattttagaggttttacttgcgttaaaaaacctcccacacctcccctgaacctgaaaca
taaaatgaatgcaattgttgttgaacttgtttattgcagcttataatggttacaaataaggcaatagcatcacaaatttcacaaa
taaggcatttttctactgcattctagtttggttgtccaaactcatcaatgtatcttatcatgtctggatctcaaatccctcggaag
ctgcgcctgtcttaggttggagtatacattttatcactttaccgctcttggattaggcagtagctctgacggccctcctgtct
taggttagtgaaaaatgtcactctcttaccgctattggctgtccagcttagctgcaggggaggttggtctggatccgagctc
gaattggccgctttacttgcagctcgtccatgccgagagtgtccggcgggcgtcacgaactccagcaggaccatgtg
atcgcgcctctcgttggggcttcttgcagggcgggactgggtgctcaggtagtgttgcgggcagcagcagggggcgtc
gccgatgggggtgttctgctggtagtggtcggcgagctgcacgctgccgtcctcgatgttggcggtatctgaagttcacc
ttgatgccgttcttctgcttgcggccatgatatagacgttgggtgtttagttgtactcagcttgcggccaggatgttgc
gtcctccttgaagtcgatgccctcagctcgatgcggttcaccaggggtgtcgcctcgaacttcacctcggcgcggtctgt
agttgccgtcgtccttgaagaagatggtgcgctcctggacgtagccttcgggcatggcggacttgaagaagtcgtgctgct
catgtggtcggggtagcggctgaagcactgcacgccgtaggtcaggggtgtcacgaggggtggccaggggcacgggca
gcttgccgggtggtgcagatgaacttcagggtcagcttgcgtaggtggcatcgcctcgcctcgcggacacgctgaact
tgtggccgtttacgtcgcggtccagctcgaccaggatgggaccaccccggtgaacagctcctcgccttgtcaccatgg
tgaattccgcggagggtggatcgggtcccggtgtcttctatggagggtcaaaacagcgtggatggcgtctccaggcgatctga
cgggtcactaaacgagctctgcttatataggcctcccaccgtacacgcctaccctcgagaagcttgatacgaattcccacgg
gggtgggggttgcgccttttcaaggcagccctgggttgcgcagggacgcgggtgctctgggctggttccgggaaacgc
agcggcgccgaccctgggtctcgcacattcttcacgtccgttcgcagcgtcaccggatcttcgccgctacccttgtgggc
ccccggcgacgcttctgctccgcccctaagtcgggaagggttccttgcggttcgcggcgtgccggacgtgacaaacgg
aagccgcacgtctcactagttaccctcgacagcggacagcgccaggggagcaatggcagcgcggcaccgcgatgggct
gtggccaatagcggctgctcagcggggcgccgagagcagcggccgggaaggggcgggtgcgggagggcgggggtgt
ggggcggtagtgtgggccctgttctgcccgcgcggtgttccgattctgcaagcctccggagcgcacgtcggcagtcgg
ctccctcgttgaccgaatcaccgacctctctcccagggggatccccgggtgcaggaattcgggcccggccagctcc
ggcgggcaggggggggctggagcgcagcgcagcgcagcccatcagtcgcaagcggaccgagctggaagtcg
agcgtgccgcgggagggcggtggggcaggtgccaccggccgcgcatggacggggcgccgtgctgctgtt
gtgcttctgggggtgtcccttgagggtgccaaggagcatgcccacaggcctgtacacacacagcgggtgagtgctgca
aagcctgcaacctgggcgagggtgtggccagccttgtggagccaaccagaccgtgtgtgagccctgctggacagcgt
gacgttctccgacgtgtgagcgcgaccgagccgtgcaagccgtgcaccgagtgctggggctccagagcatgtcggc
gccgtgcgtggaggccgacgacgccgtgtgctgcgtcctacggctactaccaggatgagacgactgggcgtcgcga
ggcgtgccgcgtgtgcgagggcggtcgggctcgtgttctcctgccaggacaagcagaacaccgtgtgcgaggagtg
ccccgacggcacgtattccgacgaggccaaccacgtggaccctgtcctgcaccgtgtgcgaggacaccgagcg
ccagctccgcgagtgacacgctggggcgacgccgagtgagggagatccctggccgttgattacacgggtccacacc
cccagagggtcggacagcacagccccagcaccaggagcctgaggcacctccagaacaagacctatagccagca
cgggtggcaggtgtggtgaccacagtgatgggcagctccagcccgtggtgaccgaggcaccaccgacaacctcatcc
ctgtctattgtccatcctggctgtgtgtgtgggcttgggctacatagccttcaagaggtggaacagggggtacctct
agagtcgagtgtagagtcgacaatcaacctctgattacaaaatttgaagattgacttggtattcttaactatgtgtccttt
acgctatgtgatacgtgctttaatgccttgtatcatgtattgttcccgtatggcttctatttctcctctgtataaatcctg
gttgtgtctctttatgaggagttgtggccgtgtgcaggaacgtggcgtggtgtgactgtgttgcacgaaccccca
ctggttggggcattgccaccacctgtcagctccttccgggacttgcgttccccctccctattgccacggcggaactcatcg

Fig. 8b (3 of 3)

ccgcctgccttgcgcgtgctggacaggggctcggctgttgggcactgacaattccgtggtgtgtcggggaagctgacgt
cctttccatggctgctgcctgtgttgccacctggattctgcgcgggacgtccttctgctacgtccctcggccctcaatccag
cggaccttccttcccgcggcctgctgcccggctctcggcctcttccgcgtcttcgccttcgcctcagacgagtcggatctc
cctttggggcgcctccccgcctggaattcgagctcggtagctttaaagaccaatgacttacaaggcagctgtagatcttagcca
cttttaaaagaaaagggggactggaagggttaattcactcccaacgaagacaagatctgcttttgccttgactgggtctct
ctggttagaccagatctgagcctgggagctctctggctaactaggaaccactgcttaagcctcaataaagcttgccttga
gtgcttcaagtagtgtgtgcccgtctgtgtgtgactctggtaactagagatccctcagacccttttagtcagtggtgaaaatct
ctagcagtagtagttcatgtcatcttattatcagttattataacttgcaagaaatgaatatcagagagttagaggaactgttta
ttgcagcttataatggttacaaataaagcaatagcatcacaaatttcacaaataaagcatttttactgcattctagttgtggtt
gtccaaactcatcaatgtatcttatcatgtctggctctagctatcccgccctaactccgccagttccgccattctccgccc
atggctgactaattttttatttatgcagaggccgaggccgcctcggcctctgagctattccagaagtagtgaggaggctttt
tggaggcctaggcttttgcgtcgagacgtacccaattcgcctatagtgagtcgtattacgcgcgtcactggccgtcgttta
caacgtcgtgactgggaaaaccctggcgttacccaacttaatgccttgcagcacatcccccttccgcagctggcgtata
gcgaagaggcccgcaccgatcgccttcccaacagttgcgcagcctgaatggcgaatggcgcgacgcgccctgtacg
gcgcattaagcgcggcgggtgtgtgtgtgttacgcgcagcgtgaccgctacacttgcagcgccttagcgcgcgtccttc
gtttcttcccttcttctcgcacgttcgcggcttccccgtcaagctctaaatcgggggctcccttaggggtccgatttag
tgcttacggcacctcgacccccaaaaaacttgattaggggtgatgggtcacgtagtgggccatcgcctgatagacggttttc
gccctttgacgttgagtgccacgttcttaatagtgagctctgttccaaactggaacaacactcaaccctatctcgggtctattct
tttgatttataagggttttgcgatttcggcctattggttaaaaaatgagctgatttaacaaaaatttaacgcgaattttaacaaa
atattaacgtttacaatttc

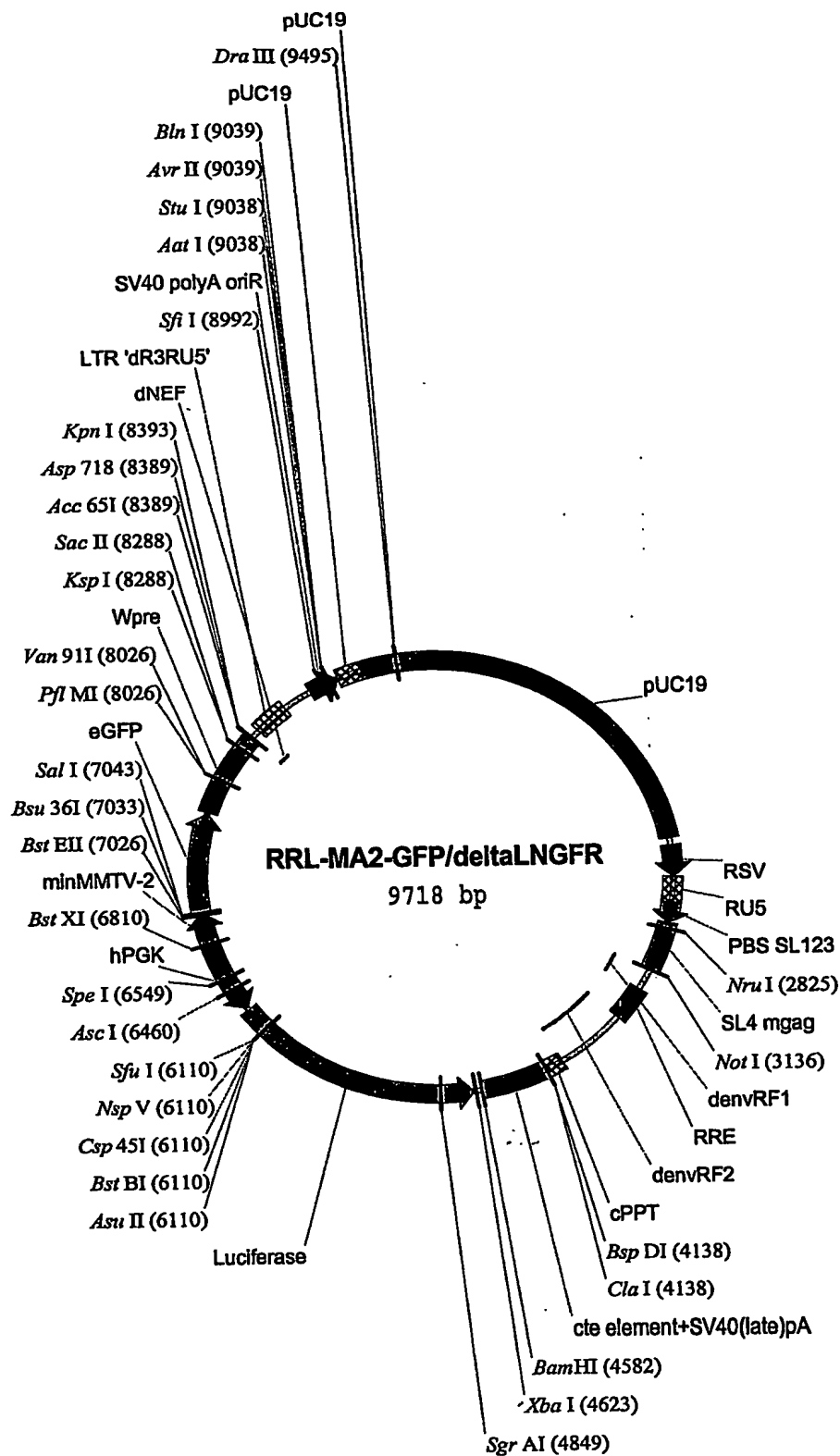


Fig. 9a

Fig. 9b (1 of 3)

cagggtggcacttttcggggaaatgtgcgcggaacccctatttgtttatttttctaaatacattcaaatatgtatccgctcatgaga
caataaacctgataaatgcttcaataatattgaaaaaggaagagatgagattcaacatttccgtgtcgccttattcccttttt
gcggtcattttgccttctgttttctcaccagaaacgctggtgaaagtaaaagatgctgaagatcagttgggtgcacgagt
gggttacatcgaactggatctcaacagcggttaagatccttgagagttttgccccgaagaacgtttccaatgatgagcacttt
taaagttctgctatgtggcgcggtattatcccgtattgacgccccggaagagcaactcggtcgccgcatacactattctcaga
atgacttgggtgagtactcaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgtgcat
aaccatgagtataaactgcggccaacttacttctgacaacgatcggaggaccgaaggagctaaccgctttttgcacaac
atgggggatcatgtaactgccttgatcgttgggaaccggagctgaatgaagccatacacaacgacgagcgtgacaccac
gatgcctgtagcaatggcaacaacgttgcgcaactattaactggcgaacttacttctagcttccggcaacaattaatag
actggatggaggcggtataaagtgcaggaccacttctgcgctcggccctccggctggctggtttattgctgataaatctgg
agccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccctcccgatcgtatgttatctacac
gacggggagtcaggcaactatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcatttgtaact
gtcagaccaagtttactcatatatacttttagattgatttaaaacttcatttttaatttaaaaggatctaggtgaagatccttttgata
atctcatgacaaaaatcccttaacgtgagtttctgtccactgagcgtcagaccccgtagaaaagatcaaaggatcttctgag
atccttttttctgcgcgtaatctgctgcttgcaacaaaaaaaccaccgctaccagcgggtggtttgttccggatcaagagct
accaactcttttccgaaggtaactggcttcagcagagcgcagatacacaataactgtccttctagttagcctgatttaggcc
accacttcaagaactctgtagcaccgcctacatacctcgtctgtctaactctgttaccagtggtgctgctccagtggtgataag
tcgtgtcttaccgggttgactcaagacgatagttaccggataaggcgacgggtcgggctgaacgggggggttcgtgcac
acagcccagcttgagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgcacgcttccc
gaaggggagaaaggcgacaggtatccggttaagcggcaggggtcggaaacaggagagcgcacgaggggagcttccaggg
ggaaacgcctggtatctttatagtcctgtcgggttccgccacctctgacttgagcgtcgtattttgtgatgctcgtcagggggg
cggagcctatggaaaaacgccagcaacgcggccttttacgggtcctggccttttctggtcctttgtcctacatgttcttctg
cgttatccctgattctgtggataaccgtattaccgcctttgagtgagctgataccgctcgcgcagccgaacgaccgagcg
cagcgagtcagtgagcaggaagcggaagagcgccaatacgaacaccgcctctccccgcgctggccgattcattaa
tgcagctggcacgacaggttcccactggaaagcgggcagtgagcgaacgaattaatgtgagttagctcactcattag
gcacccaggtttacactttatgcttccggctcgtatgtgtgtggaattgtgagcggataacaatttcacacaggaaacagc
tatgacctgattacgccaagcgcgcaattaaccctcactaaagggaacaaaagctggagctgcaagcttaatgtagtctta
tgcaatactctttagtcttgcaactggtaacgatgagtttagcaacatgccttacaaggagagaaaaagcaccgtgcatgc
cgattggtggaagtaaggtggtagatcgtgccttattaggaaggcaacagacgggtctgacatggattggacgaaccact
gaattgccgcattgcagagatattgtattaaagtgcctagctcgatacaataaacgggtctctgtggttagaccagatctgagc
ctgggagctctctggctaactagggaaacccactgcttaagccctcaataaagcttgccttgagtgttcaagtagtgtgtgcc
gtctgtgtgtgactctggttaactagagatccctcagacccttttagtcagtgtggaatctctagcagtggtgcccgaaca
gggacctgaaagcgaaagggaaccagagctctctcagcgcaggactcggcttctgaagcgcgcacggcaagagggc
gagggggcgagctggtgagtagcgcacaaaattttgactagcggaggctagaaggagagagatgggtgcgagagcgtc
agtattaaagcgggggagaattagatcgcgatgggaaaaaattcggtaaggccaggggggaaagaaaaaataaattaaa
acatatagtagtgggcaagcaggagctagaacgattcgcagttaatcctggcctgttagaaacatcagaaggctgtagaca
aatactgggacagctacaaccatccctcagacaggatcagaagaacttagatcattatataatacagtagcaaccctctatt
gtgtgcatcaaaggatagagataaaagacaccaagggaagcttttagacaagatagaggaaagagcaaaacaaaagtaagac
caccgcacagcaagcggccgctgatcttcagacctggaggaggagatatgagggacaattggagaagtgaattatataaa
tataaagtagtaaaaattgaaccattaggagtagcaccaccaaggcaagagaagagtggtgcagagagaaaaagag
cagtgggaataggagctttgttcttgggttcttgggagcagcaggaagcactatgggcgcagcctcaatgacgtgacgg
tacaggccagacaattattgtctggtatagtgcagcagcagaacaatttctgaggggtattgaggcgcaacagcatctgtt
gcaactcacagtctggggcatcaagcagctccaggcaagaatcctggctgtggaagatacctaaggatcaacagctcc
tggggatttgggggtgctctggaaaactcatttgcaccactgctgtgccttggatgctagtgtgagtaataaactctggaac
agattggaatcacacgacctggatggagtgggacagagaaattaacaattacacaagcttaatacactccttaattgaagaa
tcgcaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagtttgggaattggttaacataac
aaattggctgtggtatataaaattattcataatgatagtaggaggttggtaggttaagaatagttttgtgacttctatagtg
aatagagttaggcagggaattaccattatcgtttcagaccacctccaaccccgagggggaccgcagaggccgaagg

Fig. 9b (2 of 3)

aatagaagaagaaggtggagagagagacagagacagatccattcgattagtgaacggatctcgacggatcggtaacttt
taaaagaaaaaggggggattgggggtacagtcaggggaaagaatagtagacataatagcaacagacatacaactaaa
gaattacaaaaaacaattacaaaaattcaaaattttatcgatcacgagactagcctcgagagatctgatcataatcagccatac
cacatttgtagaggtttacttgctttaaaaaacctcccacacctccccctgaacctgaaacataaaatgaatgcaattgtgttg
ttaactgtttattgcagcttataatggttacaataaggcaatagcafcacaaatttcacaaataaggcattttttactgcattc
tagttttggttgccaaactcatcaatgtatcttatcatgtctggatctcaaatccctcggaagctgcgcctgtcttaggttgag
tgatacatttttatcattttaccgcttttgattagggcagtagctcgacggccctcctgtcttaggttagtgaaaaatgtcact
ctcttaccgctcattggctgtccagcttagctcgacggggaggtggtctggatccctggatatcaagaattcgtcctcgagct
cagatcctctagaattacacggcgatctttccgcccttctggcctttatgaggatctctctgatttttcttgcgtcgagtttccgg
taagacctttcgggtacttcgtccacaacacaactcctccgcgaacttttgcgggtgttacttgactggccacgtaatccac
gatctctttttcgtcatcgtctttccgtgctccaaaacaacacggcgccgggaagttcaccggcgatcgtcggggaaga
cctcgacacctgcgtcgaagatgttgggtgttgagcaagatggattccaattcagcgggagccacctgatagcctttgt
actaatcagagacttcagggcggtcaacgatgaagaagtgttcgtcttcgtccagtaagctatgtctccagaatgtagccat
ccatccttgtaatcaaggcgttggtcgtctccgattgtttacataaccggacataatcataggacctctcacacacagttcg
cctcttgattaacgccagcggtttccggtatccagatccacaaccttcgttcaaaaaatggaacaactttaccgaccgcg
cccgtttatcatccccctcgggtgtaatcagaatagctgatgtagtctcagtgagcccatatccttgctgatacctggcaga
tggaacctcttggaaccgcttccccgacttcttagagaggggagcgccaccagaagcaatttcgtgtaaatagataaat
cgtatttgtaatcagagtgcttttgccgaagaaggagaatagggttgccaccagcagcgacatttgaatcttgaatcctga
aggctcctcagaaacagcttcttctcaaatctatacattaagacgactcgaaatccacatatcaaatatccgagtgtagtaaac
attccaaaaccgtgatggaatggaacaacacttaaaatcgcatatccggaatgatttgattgcaaaaaataggatctctggc
atgcgagaatctcacgcaggcagttctatgaggcagagcgacaccttttaggcagaccagtagatccagaggagttcatgat
cagtgcaattgtcttgccctatcgaaggactctggcacaaaatcgattcattaaaaccgggaggttagatgagatgtgacga
acgtgtacatcgactgaaatccctggtaatccgttttagaatccatgataataatttttgatgattgggagctttttgcacgtt
caaaatttttgcaacccttttggaacgaacaccacggtaggctgcgaaatgccatactgttgagcaattcacgttcatta
taaattgtcgttcgcgggcgcaactgcaactccgataaataacgcgcccaacaccggcataaagaattgaagagagtttca
ctgcatacagcagttctgtgattgtattcagcccatatcggttcatagctcttgccaaccgaacggacatttcgaagtactcag
cgtaagtgtatgccacctcgatatgtcatctgtaaaagcaattgttcaggaaccagggcgatctcttcatagccttatgca
gttgctctccagcggttccatctccagcggatagaatggcgccgggctttctttatgttttgccgtcttccatggtgaattcc
gatccccctggggagagaggtcgggtgattcggtcaacgagggagccgactgccgacgtgcgctccggagggttgacaga
atgcggaacaccgcgcgggcaggaacagggccacactaccgcccacaccccgctcccgaccgcccccttccggg
ccgctgctctcggcgcgccccgctgagcagccgctattggccacagcccatcgcggtcggcgcgctgccattgctccctg
gcgctgtcgtctgcgagggtactagtgcagctgcggcttccgtttgtacgtccggcacgccgcgaaccgcaaggaaac
cttcccgacttagggcgaggcaggaagcgtcgccggggggcccaagggtagcggcgaagatccgggtgacgctg
cgaacggacgtgaagaatgtgcgagaccagggctggcgccgctgcgtttccgggaaccacgcccagagcagccgcg
tcctgcgcaaacccagggctgccttggaaggcgcaaccccaacccgtgggaattcgatatcaagcttgccatgttc
tttggaatctatcaagtcttatgtaaatgcttatgtaaacataatataaaagagtgtgatttttgagtaaaactgcaacagtc
ctaacttcttctctcgtgtgtttgtgtctgttcgccatcccgtctccgctcgtcacttatccttcacttttcagaggggtcccccg
agatcccggtcacctcaggtcgggtcgacaacctggtgagcaaggcgaggagctgttcaccgggggtggtgcccatc
ctggtcgagctggacggcgacgtaaacggccacaaggtcagcgtgtccggcgagggcgagggcgatgccacctacgg
caagctgacctgaagttcatctgcaccaccggcaagctgccgtgcccgtggccaccctcgtgaccacctgacctacg
gcgtgcagtgctcagccgctacccgaccacatgaagcagcacgacttctcaagtccgcatgccgaaggctacgtc
caggagcgcaccatcttctcaaggacgacggcaactacaagaccgcgccgaggtgaagttcgagggcgacacctg
gtgaaccgcatcgagctgaaggcatcgacttaaggaggacggcaacatcctggggcacaagctggagtacaactaca
acagccacaacgtctatatcatggccgacaagcagaagaacggcatcaagggtgaacttcaagatccgccacaacatcgag
gacggcagcgtgcagctcgccgaccactaccagcagaacacccccatcgccgacggccccgtgctgctgcccgacaac
cactacctgagcaccagtcgcccgtgagcaagaccccaacgagaagcgcgatcacatggtcctgtgaggttcgtga
ccgcccgccggatcactctcggcatggacgagctgtacaagtaagcggcctcgacaatcaacctctggattacaaaattt
gtgaagattgactggattcttaactatgttgctcctttacgctatgtggatagctgctttaatgcctttgtatcatgctattgt

Fig. 9b (3 of 3)

tcccgtatggctttcattttctcctccttgataaatcctggttgctgtctctttatgaggagttgtggcccgtgtgcaggcaacgtg
gcgtggtgtgcactgtgttgctgacgcaacccccactggttggggcattgccaccacctgtcagctcctttccgggactttc
gctttccccctccctattgccacggcggaactcatcgccgcctgccttgcccgctgctggacaggggctcggctgttgggc
actgacaattccgtggtgtgtcgggggaagctgacgtcctttccatggctgtcgcctgtgttgccacctggattctgcgcgg
gacgtccttctgctacgtcccttcggccctcaatccagcggaccttccctcccgccgctgtgccggctctcgggcctcttc
cgcgtcttcgccttcgccctcagacgagtcggatctcccttggggccgcctccccgcctggaattcagctcggtagctttaa
gaccaatgacttacaaggcagctgtagatcttagccactttttaaagaaaaggggggactggaagggttaattcactccca
acgaagacaagatctgcttttgcttgtagtggtctctggttagaccagatctgagcctgggagctctctggctaactagg
gaacccactgcttaagcctcaataaagcttgccctgagtgcttcaagtagtgtgtgcccgtctgtgtgtgactctggttaactag
agatccctcagacccttttagtcagtgtggaaaatctctagcagtagtagtcatgtcatcttattattcagtattataacttgcaa
agaaatgaatatcagagagtggaggaacttggttatgacgcttataatggttacaataaagcaatagcatcacaatttca
caaataaagcattttttcactgcattctagttgtggttggtccaaactcatcaatgtatcttatcatgtctggctctagctatccgc
ccctaactccggccagttccgccattctccgccccatggctgactaattttttattatgacagaggccgagggccgcctcgg
cctctgagctattccagaagtagtgaggaggcctttttggaggcctaggcctttgcgtcgagacgtaccaattcgcctatag
tgagtcgtattacgcgcgtcactggccgtcgttttacaacgtcgtgactgggaaaaccctggcggtaccaactaatcgc
ttgcagcacatcccccttcgccagctggcgtaatagcgaagaggcccgaccgatcgcccttcccaacagtgcgcagc
ctgaatggcgaatggcgcgacgcgcctgtagcggcgcatgaagcgcggcgggtgtgtgtgtgttacgcgcagcgtgacc
gtacacttgccagcgccctagcggccgctccttcgcttcttcccttcttcgccacgttcgccggcttccccgtcaag
ctctaaatcgggggctcccttaggggtccgatttagtgctttacggcacctcgacccaaaaaacttgattagggtgatggt
cacgtagtgggccatcgccctgatagacggttttcgcccttgacgttgagtcacgttcttaatagtggactcttgtcca
aactggaacaacactcaaccctatctcggctattctttgattataagggattttgccgatttcggcctattggttaaaaaatga
gctgatttaacaaaaatttaacgcgaattttaacaaaaatattaacgtttacaatttc

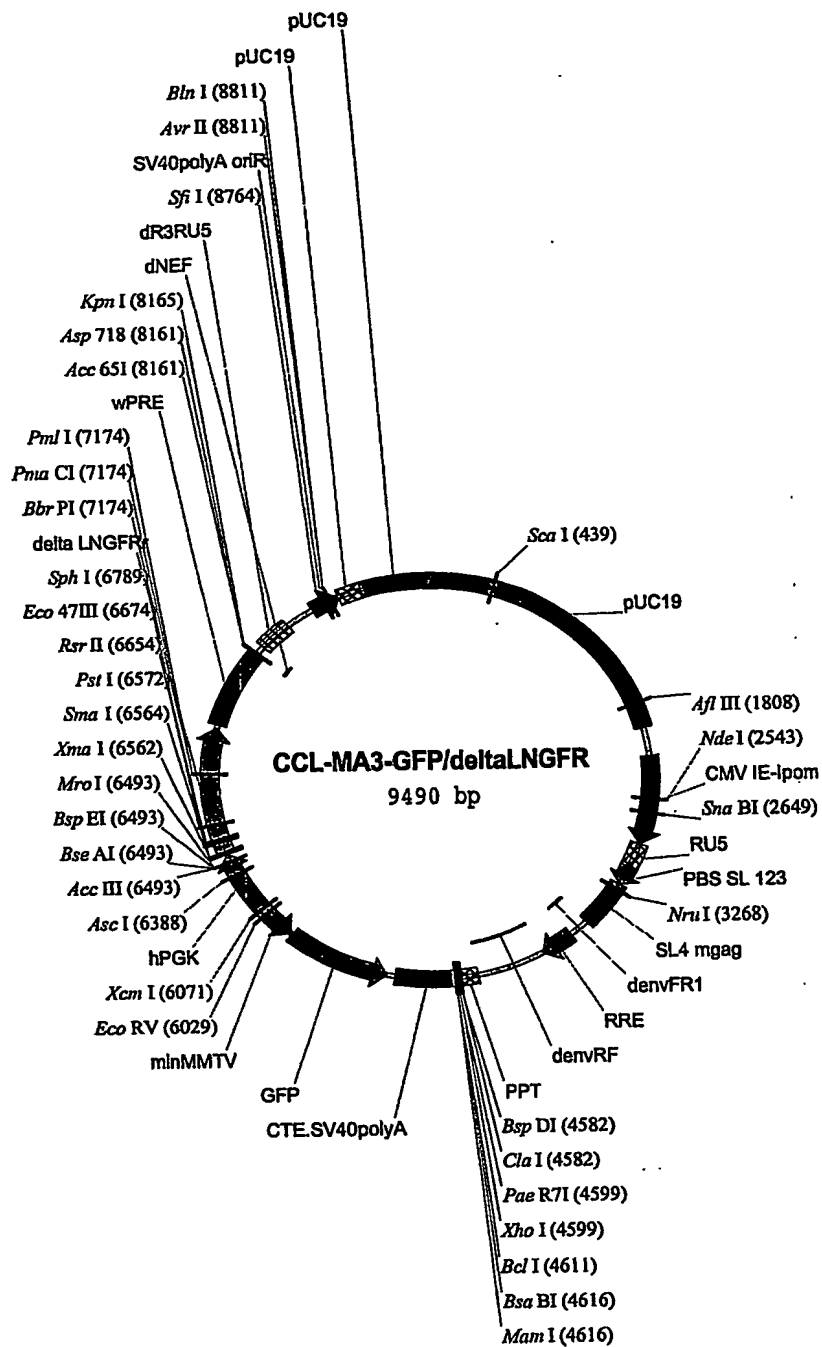


Fig. 10a

Fig. 10b (1 of 3)

cagggtggcacttttcggggaaatgtgcgcggaaccctatttgttttttctaaatacattcaaatatgtatccgctcatgaga
caataaccctgataaatgcttcaataatattgaaaaaggaagagatgagattcaacatttccgtgtcgccttattccctttt
gcggtcatttgccttctgttttgcaccagaaacgctggtgaaagtaaaagatgctgaagatcagttgggtgcacgagt
gggttacatcgaactggatctcaacagcggtaagatccttgagagtttgcggcgaagaacgtttccaatgatgagcattt
taaagtctgctatgtggcgcggtattatcccgtattgacgccgggcaagagcaactcggtcgccgcatacactattctcaga
atgacttggttgagtactaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgtgccat
aacatfagtgataacactgcggccaacttacttctgacaacgatcggaggaccgaaggagctaaccgcttttgcacaac
atgggggatcatgtaactgccttgatcgttgggaaccggagctgaatgaagccatacacaacgacgagcgtgacaccac
gatgcctgtagcaatggcaacaacgttgcgcaactattactggcgaactacttactctagcttccggcaacaattaag
actggatggaggcggataaagtgcaggaccacttctgcgctcggccttccggctggctggtttattgctgataaatctgg
agccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggttaagccctcccgtatcgtagtattctacac
gacggggagtcaggcaactatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcattgtaact
gtcagaccaagttaactcatatatacttttagattgatttaaaacttcattttaatttaaaaggatctaggtgaagatccttttgata
atctcatgacaaaaatcccttaacgtgagtttctgtccactgagcgtcagaccccgtagaaaagatcaaaggatcttcttag
atccttttttctgcgcgtaatctgctgcttgcacaacaaaaaacaccgctaccagcgggtggtttgttgcggatcaagagct
accaactcttttccgaaggtaactggcttcagcagagcgcagatacacaatactgtccttctagtgtagccgtagttaggcc
accacttcaagaactctgtagaccgcctacatacctcgtctgttaactctgtaccagtggtgctgccagtgccgataag
tcgtgtcttaccgggttgactcaagacgatagttaccggataaggcgcagcggctgggctgaacgggggggtcgtgcac
acagcccagcttgagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgcacgcttccc
gaagggagaaaggcggacaggtatccggtaagcggcagggctggaacaggagagcgcacgagggagcttccaggg
ggaaacgcctggtatctttatagctctgtcgggttccacactctgacttgagcgtcgttttgtgatgctcgtcagggggg
cggagcctatgaaaaacgccagcaacgcggcctttttacggttcctggccttttgccttttgcacatgttcttctctg
cgttatcccctgattctgtggataaccgtattaccgcctttgagtgaagctgataccgctcgcgcagccgaacgaccgagcg
cagcgagtcagtgagcaggaagcggagagcgcaccaatcgcgaacccgctctccccgcgcgttgccgattcattaa
tgagctggcacgacaggttcccactggaagcgggcagtgagcgcacgcaattaatgtgagttagctcactcattag
gcaccccaggtttacatttattgcttcggctcgtatgtgtgtggaattgtgagcggataacaatttcacacaggaaacagc
tatgacatgattacgccaagcgcgcaattaaccctcactaaagggaacaaaagctggagctgcaagcttggccattgcat
acgttgatccataatcataatgtacatttatattggctcatgtccaacattaccgcatgttgacattgattattgactagtatta
atagtaataattacgggggtcatttagttcatagcccatatattggagtccgcgttacataacttacggtaaatggccgcctgg
ctgaccgccaacgacccccgccattgacgtcaataatgacgtatgttccatagtaacgccaatagggaacttccattga
cgtcaatgggtggagtattacggttaactgccacttggcagtagatcaagtgtatcatatgccaagtacgccccattga
cgtcaatgacggttaaatggccgcctggcattatgccagtagatgaccttattggacttctcacttggcagtagatctacgt
attagtcacgtattaccatggtgatgcgggttggcagtagatcaatgggcgtggatagcgggttactcacggggatttcc
aagtctccacccattgacgtcaatgggagtttgtttggcaccaaaatcaacgggacttccaaaatgtcgttaacaactccg
ccccattgacgcaaatggcggttaggcgtgtacgggtgggaggtctatataagcagagctcgttagtgaaacggggtctct
ctggttagaccagatctgagcctgggagctctctggctaactagggaaccactgcttaagcctcaataaagcttgcctga
gtgcttcaagtagtgtgtcccgtctgtgtgtgactctgtaactagatccctcagacccttttagtcagtgtggaaaatct
ctagcagtgccgccgaacaggacgtgaaagcgaagggaaccagagctctctcagcagggactcggcttctgta
agcgcgcacggcaagaggcggagggcggcgactggtgagtagccaaaaatttgactagcggaggctagaaggaga
gagatgggtgcgagagcgtcagtttaagcgggggagaattagatcgcatgggaaaaaattcgggttaaggccagggggg
aaagaaaaaataaaatataatagtagtggtgcaagcagggagctagaacgattcgcagttaatcctggcctgttagaa
acatcagaaggctgtagacaatactgggacagctacaaccatcccttcagacaggatcagaagaacttagatcattatata
atacagtagcaaccctctattgtgtcatcaaggtatagagataaaagacaccaagggaagcttagacaagatagaggaag
agcaaaacaaaagtaagaccaccgcacagcaagcggccgctgatcttcagacctggaggaggagatagagggacaat
tggaagagtaattatataatataaagtagtaaaattgaaccattaggagtagcaccaccaaggcaagagagagtg
gtgcagagagaaaaaagagcagtggaataggagcttcttcttgggttcttgggagcagcaggaagcactatggcgcg
agcctcaatgacgctgacggtacaggccagacaattattgtctggtatagtgacgagcagaacaatttctgagggctatt
gaggcgcaacagcatctgttgaactcacagctctggggcatcaagcagctccagggaagaatcctggctgtggaagata

Fig. 10 b (2 of 3)

cctaaaggatcaacagctcctggggatttgggggttgcctctggaaaactcatttgcaccactgctgtgccttggaaatgctagttag
gagtaataaaatctctggaacagatttggaaatcacacgacctggatggagtgaggacagagaaattaacaattacacaagctta
atacactccttaattgaagaatcgaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagttt
gtggaattgtttaacatacaaaattggctgtggtatataaaattattcataatgataagtaggaggcttggtaggttaagaatag
ttttgtgtactttctatagtgaatagagtaggcagggatattcaccattatcgtttcagacccacctcccaaccccgagggg
acccgacagggccggaaggaaatagaagaagaagggtggagagagagacagagacagatccattcgatttagtaacgggatc
tcgacgggtatcggttaacttttaaaagaaaaggggggattgggggtacagtgacggggaagaatagtagacataatag
caacagacatacaaaactaaagaattacaaaaacaaattacaaaaattcaaaattttatcgatcacgagactagcctcgagga
gatctgatcataatcagccataccacattttagaggttttacttgccttaaaaaacctccacacctccccctgaacctgaac
ataaatgaatgaattgttgttgaactgtttattgcagcttataatggttacaataaggcaatgacacacaaatttcacaa
ataaggcattttttacttgcatttctagtttggttgtccaaactcatcaatgtatcttatcatgtctggatctcaaatccctcgga
gtgcgcctgtcttaggttggagtgatacattttatcacttttaccgtcttggattaggcagtagctctgacggccctctgt
cttaggttagtgaataatgtcactctcttaccgtcattggctgtccagcttagctcgcaggggaggtggtctggatccaccat
gtctagagaataggaaacttcggaataggaaacttcgcggccgcttactgtacagctcgtccatgccgagagtgatccggc
ggcggtcagcaactccagcaggaccatgtgacgcgcttctcgttgggggtcttgcagggcggactgggtgctcaggta
gtggttgcgggcagcagcagggggcgcgcgatgggggtgttctgctggtagtgtcggcgagctgcacgctgccg
tcctcgatgttgggggatcttgaagttcaccttgatgccgttcttctgcttgcggccatgatatagacgttgggtgttga
gttgactccagcttgcggccaggatgttgcgcctccttgaagtcgatccctcagctcgcggttcaccagggtgtc
gccctcgaacttcacctcggcgcggttctgtagtgtccgtcgtccttgaagaagatggtgcgctcctgacgtagccttcg
ggcatggcggacttgaagaagtcgtgctgttcatgtggtcgggtagcggctgaagcactgcacgccgtaggtcagggt
ggtcacgaggggtgggcccagggcacgggcagcttgcgggtggtgcagatgaacttcagggtcagcttgcgtaggtggc
atcgccctcgcctcgcggacacgctgaacttgtggcgtttacgtcgcggtccagctcagccaggatgggaccaccc
cggtgaacagctcctcgccttgcctaccatggttgcgacccgacctgaggggtgaccgggatctgcggggggaccctct
gaaaagtgaaggataagtgcgagcggagacgggatggcgaacagacacaaacacacgagagaagaatgtaggact
gttgcaagtttactcaaaaaatcagcactctttatattatggtttacataagcatttacataagacttggatagattcaaaagaa
cataggcaagcttgatatcgaattccacgggggtgggggtgcgcctttccaaggcagccctgggttgcgcagggacgc
ggctgtcttgggcgtggtccgggaaacgcagcggcgccgacctgggtctcgcacattcttcacgtccgttcgcagcgt
caccggatcttcgccgtaccttgtgggcccccgccgacgcttctgctccgccctaagtcgggaaggttcttgcg
gttcgcggcgtgccggacgtgacaaacggaagccgcacgtctactagtacctcgcagacggacagcgcaggggagc
aatggcagcgcgccgaccgcgatgggctgtggccaatagcggctgctcagcggggcgcgcggagagcagcggccgg
gaagggggcgggtgcgggagggcgggggtgtggggcggtagtgtggggccctgttctgccgcgcggtgtccgattctgca
agcctccggagcgcacgtcggcagtcggctccctcgttgaccgaatcaccgacctctctcccagggggatccccggg
ctgcaggaattcgggcccgcggccagctccggcgggcagggggggcgctggagcgcagcgcagcgcagccccatcag
tcgcaaaaggcggaccgagctggaagtcgagcgcgtccgcgggagggcggcgatggggggcaggtgccaccggccgc
gccatggacggggcgcgcctgtgctgttgccttctgggggtgtcccttggaggtgccaaggaggcatgccccacagg
cctgtacacacacagcggtagtgctgcaaaagcctgcaacctgggcgaggggtgtggccagccttgtggagccaaccag
accgtgtgtgagccctgcctggacagcgtgacgttctccgacgtggtgagcgcgaccgagccgtgcaagccgtgcaccg
agtgcgtggggctccagagcatgtcggcgccgtgcgtggaggccgacgacgccgtgtgccgtgcgcctacggctact
accaggatgagacgactggcgctgcgagggcgtgccgcgtgtgcgagggcgggctcgggcctcgtgttctcctgccagg
acaagcagaacaccgtgtgcgaggagtgccccgacggcacgtattccgacgaggccaaccacgtggaccctgtgcctgc
cctgcaccgtgtgcgaggacaccgagcgcagctccgcgagtgacacgctggggcagccgagtgccgaggagatc
cctggccgttggattacacgggtccacacccccagagggtcggacagcacagccccagcaccagggagcctgaggga
cctccagaacaagacctcatagccagcacgggtggcaggtgtggtgaccacagtgatgggcagctcccagccgtggtga
cccagggcaccaccgacaacctcatccctgtctattgtccatcctggctgtgtggttggggccttgtggcctacatagcc
ttcaagaggtggaacagggggatcctctagagtcgagcttagagtcgacaataacctctggattacaaaatttgtgaaga
tgactggtattcttaactatgttgccttttacgctatgtggatacgtgcttaatgcctttgtatcatgtattgtctccgtagt
gcttcattttctcctcctgtataaatcctggttgcgtctctttataggagttgtggcccgttgcaggcaacgtggcggtgtg
tgcactgtgttgcgtgacgcaacccccactggttggggcattgccaccacctgtcagctccttccgggacttgcgttcccc

Fig. 10b (3 of 3)

ctccctattgccacggcgggaactcatcgccgcctgccttcccgcctgctggacaggggctcggctgttgggcactgacaat
tccgtggtgtgtcgggggaagctgacgtccttccatggctgctgcctgtgttgcacctggattctgcgcgggacgtcctt
ctgctacgtcccttcggccctcaatccagcggaccttccctccgcggcctgctgccggctctcggcctcttccgcgtctt
gccttcgcctcagacgagtcggatctcccttggggccgcctccccgcctggaattcagctcggtagctttaaagaccaatg
acttacaaggcagctgtagatcttagccacttttaaaagaaaaggggggactggaagggttaattcactcccaacgaaga
caagatctgcttttgcctgtactgggtctctctggttagaccagatctgagcctgggagctctctggctaactagggaaacca
ctgcttaagcctcaataaagcttgccttgagtgcctcaagtagtgtgtgcccgtctgtgtgtgactctggttaactagagatccc
tcagacccttttagtcagtgtggaaaatctctagcagtagtagttcatgtcatcttattttagtattataacttgcaagaaatg
aataatcagagagtgcagaggaactgtttattgcagcttataatggttacaaataaagcaatagcatcacaaatttcacaaataa
agcattttttcactgcattctagtgtgtgtgtgtccaaactcatcaatgtatcttatcatgtctggctctagctatcccgccctaac
tccgccagttccgccattctccgccccatggctgactaattttttatttatgcagaggccgaggccgcctcggcctctga
gtattccagaagtagtgaggaggtttttggaggcctaggttttgcgtcgagacgtacccaattcgccttatagtgtg
gtattacgcgcgtcactggcgtcgttttacaacgtcgtgactgggaaaaccctggcgttacccaacttaatgccttgcag
cacatcccccttcgccagctggcgtaatagcgaagaggcccgaccgatcgccttcccaacagttgcgcagcctgaat
ggcgaatggcgcgacgcgcctgtagcggcgcaataagcgcggcgggtgtgtgtgttacgcgcagcgtgaccgctaca
cttgcagcgccttagcggcgctcctttcgttcttcccttcccttctcgcacgttcgccggctttcccgtcaagctctaa
atcggggggtcccttaggggttccgatttagtgccttacggcacctcgaccccaaaaaacttgattaggggtgatggtcacgta
gtggggcatcgcctgatagacgggttttcgccctttgacgttggagtccacgttctttaatagtggaactctgttccaaactgg
aacaacactcaaccctatctcggcttattctttgattataagggttttgcgatttcggcctattgggttaaaaaatgagctgatt
taacaaaaatttaacgcgaattttaacaaaatattaacgtttacaatttc

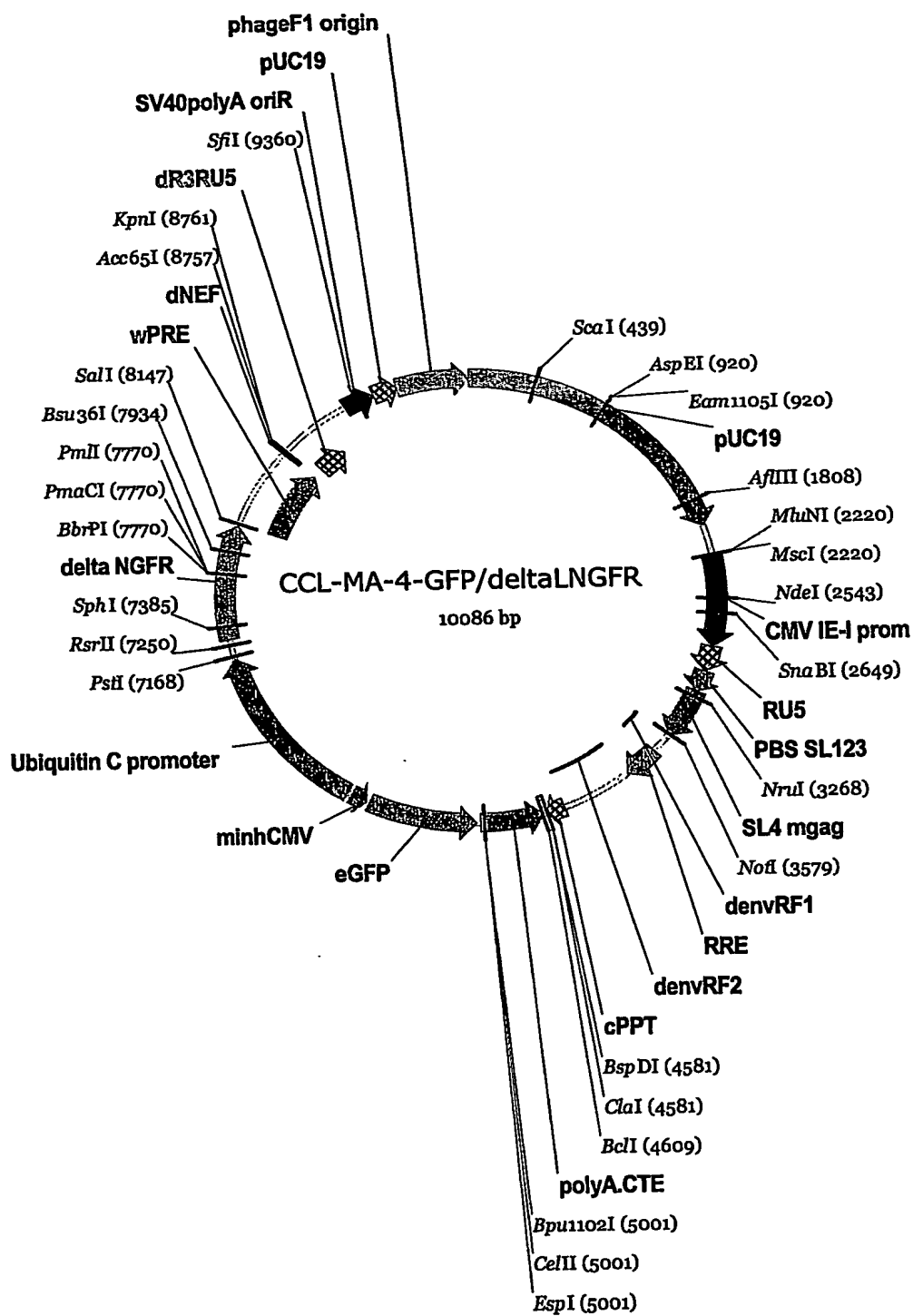


Fig. 11a

Fig. 11b (1 of 3)

cagggtggcacttttcggggaaatgtgcgcggaacccctatttgttttttctaaatacattcaaatatgtatccgctcatgaga
caataaccctgataaatgcttcaataatattgaaaaaggaagagtagtattcaacatttccgtgctgcccttattcccttttt
gcggcattttgccttctgttttgcaccagaaacgctggtgaaagtaaaagatgctgaagatcagttgggtgcacgagt
gggttacatcgaactggatcacaacagcggttaagatccttgagagtttgcgccgaagaacgtttccaatgatgagcacttt
taaagtctgctatgtggcgcggtattatcccgtattgacgccgggcaagagcaactggctgccgcatacactattctcaga
atgacttgggtgagtactaccagtcacagaaaagcatcttacggatggcatgacagtaagagaattatgcagtgtgccat
aaccatgagtataacactgcggccaacttacttctgacaacgatcggaggaccgaaggagtaaccgctttttgcacaac
atgggggatcatgtaactcgccttgatcgttgggaaccggagctgaatgaagccataccaaacgacgagcgtgacaccac
gatgcctgtagcaatggcaacaacgttgcgcaactattaactggcgaactacttacttagcttccggcaacaattaatag
actggatggaggcggataaagtgcaggaccacttctgcgctcggcccttccggctggctgtttattgctgataaatctgg
agccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccctcccgatcgtatgtattctacac
gacggggagtcaggcaactatggatgaacgaaatagacagatcgtgagataggtgcctcactgattaagcatttgtaact
gtcagaccaagttactcatatatactttagattgatttaaacttcaattttaaattaaaaggatctaggtgaagatccttttgata
atctcatgacaaaatcccttaacgtgagtttctgtccactgagcgtcagaccccgtagaaaagatcaaaagatcttcttgag
atccttttttctgcgcgtaatctgctgcttgaacaaaaaaaccaccgctaccagcgggtgtttgtttgccgatcaagagct
accaactccttttccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctagttagccgtagttaggcc
accacttcaagaactctgtagcaccgctacatacctgctctgtaatcctgttaccagtggctgctgccagtggcgataag
tcgtgtcttaccgggttggactcaagacgatagttaccggataaggcgcagcggctgggctgaacgggggggttcgtgcac
acagcccagcttggagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcggcacgcttccc
gaaggagaaaaggcggacaggtatccgtaagcggcagggtcggaaacaggagagcgcacgaggggagcttcagggg
ggaaacgcctggatctttatagtcctgtcgggttccgacacctgtgacttgagcgtcgattttgtgatgctcgtcagggggg
cggagcctatggaaaaacgccagcaacgcggccttttacgggttctggcctttgtgctgcctttgtctacatgttcttctg
cgttatccctgattctgtggataaccgtattaccgctttgagttagctgataccgctcggcgagccgaacgaccgagcg
cagcgagtcagttagcgaggaagcgggaagcgcgaatacgaacccgcttcccgcgcggttggccgattcattaa
tgcagctggcagcagaggtttccgactggaaagcgggacgtgagcgaacgcaattaatgtgagttagctcactcattag
gcacccaggcctttacactttatgcttccggctcgtatgttgtgtggaattgtgagcggataacaatttcacacaggaaacagc
tatgaccatgattacgccaagcgcgaattaaccctactaaagggaacaaaagctggagctgcaagcttggccattgcat
acgttgtatccatacataatgtacatttatattggtcatgtccaacattaccgccatgttgacattgattatgactagtatta
atagtaataattacggggctcattagttcatagcccatataggagttccggttacataacttacggtaaatggcccgcctgg
ctgaccgcccacgacccccgccattgacgtcaataatgacgtatgttcccatagtaacgccaatagggaactttccattga
cgtcaatgggtggagtatttacggtaaaactgccacttggcagttacatcaagtgtatcatatgccaaagtagccccctattga
cgtcaatgacggtaaatggcccgcctggcattatgccagttacatgaccttattgggactttcctacttggcagttacatctacgt
attagtcacgtctattaccatgggtgatcgggttggcagttacatcaatgggcgtggatagcgggttgactcacggggatttcc
aagtcctccacccattgacgtcaatgggagtttgtttggcaccaaaatcaacgggactttccaaaatgtcgttaacaactccg
ccccattgacgcaaatgggcggtaggcgtgtacgggtgggaggtctatataagcagagctcgtttagtgaaccggggtctct
ctgggttagaccagatctgagcctgggagctctctggctaactagggaacccactgcttaagcctcaataaagcttgccttga
gtgcttcaagtagtgtgtgcccgtctgtgtgtgactctgtaactagagatccctcagacccttttagtcagtgtggaatatct
ctagcagtggcggccgaacagggaacctgaaagcgaaagggaacagagctctctcagcgcaggactcggcttgcgtga
agcgcgcacggcaagaggcggggggcggcactgggtgagtagcggcaaaaattttgactagcggaggctagaaggaga
gagatgggtgcgagagcgtcagtattaagcgggggagaattagatcgcatgggaaaaaattcggtaaggccagggggg
aaagaaaaataataaataaataatagtagtggaagcaggagctagaacgattcgcagtaatcctggcctgttagaa
acatcagaaggctgtagacaaactgggacagctacaacctcccttcagacaggatcagaagaacttagatcattatata
atacagtagcaaccctctattgtgtgcatcaaaaggatagagataaaagacaccaagggaagctttagacaagatagaggaaag
agcaaaacaaaagtaagaccaccgcacagcaagcggccgctgatcttcagacctggaggaggagatatgagggacaat
tgagagaagtgaattatataaataaagtagtaaaaaattgaaccattaggagtagcaccaccaaggcaagagaagagtg
gtgcagagagaaaaagagcagtgagggaataggagcttggcttctgggagcagcaggaagcactatgggcgc
agcctcaatgacgctgacggtagcggcagacaattattgtctgtatagtcagcagcagaacaatttgcaggggctatt
gaggcgcaacagcatctgttgcaactcacagcttggggcatcaagcagctccaggcaagaatctggctgtggaagata

Fig. 11 b (2 of 3)

cctaaggatcaacagctcctggggatttggggttgcctcggaaaactcattgcaccactgctgtgccttggatgctagttg
gagtaataaatctctggaacagattggaatcacacgacctggatggagtgggacagagaaattaacaattacacaagctta
atacactccttaattgaagaatcgcaaaaccagcaagaaaagaatgaacaagaattattggaattagataaatgggcaagttt
gtggaattggttaacataacaaattggctgtggtatataaaattattcataatgatagtaggaggcttggtaggtttaagaatag
tttttgcgtactttctatagtaatagagttaggcagggatattcaccattatcgttcagacccacctcccaaccccaggggg
acccgacaggccccgaaggaaatagaagaagaagggtggagagagagacagagacagatccattcgattagtgaacggatc
tcgacggatcgggttaacttttaaaagaaaaggggggattggggggtacagfgcaggggaaagaatagtagacataatag
caacagacatacaaaactaaagaattacaaaaacaaattacaaaaattcaaaattttatcgatcacgagactagccctcgagag
atctgatcataatcagccataccacattttagaggttttacttgccttaaaaaacctccacacctccccctgaacctgaacaa
taaatgaatgcaattgttgttgaacttgttattgcagcttataatggttacaataaggcaatagcatcacaaatttcacaaa
taaggcattttttcactgcattctagtttgggttgcctaaactcatcaatgtatcttatcatgtctggatctcaaatccctcggaag
ctgcgcctgtcttaggttggagtatacattttatcactttaccctgtcttggattaggcagtagctctgacggccctctgtct
taggttagtgaaaaatgtcactctcttaccctgtcattggctgtccagcttagctcgaggggagggtggtctggatccgagctc
gaattggccgcttacttgtacagctcgtccatgccgagatgatccggcgggcgggtcacgaactccagcaggaccatgtg
atcgcgcttctcgttggggcttctgtcagggcgactgggtgctcaggtagtgttgcgggcagcagcagggggccgtc
ggcgatgggggtgttctgctggtagtgtgctggcgagctgcacgctgccgtcctgatgttgcggcgatctgaagttcacc
ttgatgccgttctctgtctgtcggccatgatatagacgttggctgtttagttgtactccagcttgcctccaggtgttgc
gtcctcctgaagtcgatgcccttcagctcgtatgcgggtcaccagggtgtcggcctgaacttcacctggcggggtcttgt
agttgccgtcgtcctgaagaagatggtgcgtcctggacgtagccttcgggcatggcgactgaagaagtcgtgctgctt
catgtggtcgggtagcggctgaagcactgcacggcgtaggtcaggggtggtcacgaggggtgggcaggggcacgggca
gcttgcgggtggtgcagatgaacttcagggtcagcttgcctaggtggcatcgccctcgccctcgccggacacgctgaact
tgtggccgtttacgtcggcgtccagctcgaccaggatgggcaccacccgggtgaacagctcctcgccctgtcaccatgg
tgaattccgcggaggctggatcggtcccggtgtctctatggaggtcaaaacagcgtggatggcgtctccaggcgatctga
cgggtcactaaacgagctctgcttatataggcctccaccgtacacgcctaccctcgagaagcttgattaaccctgtcggct
ccagatctggcctccgcggcggttttggcgctcctccgcgggcgccccctcctcacggcgagcgtgccacgtcagac
gaagggcgagcagcgtcctgatcctccgcccggacgctcaggacagcggcccgtgctcataagactcggccttag
aaccacagtatcagcagaaggacattttaggacgggacttgggtgactctagggcacttgggttttcttcagagagcggaa
aggcgaggaaaagtagtcccttctcggcgattctcgggagggatcctcgtggggcggtgaacgccgatgattatataagg
acgcggcggtgtggcacagctagtccgtcgcagccgggatttgggtcgcgggttcttgttggatcgtgtgatcgtca
cttggtagttgcgggctgctgggctggccggggcttctgtggcgccggggcgtcgggtgggacggaagcgtgtggag
agaccgccaagggtgtagtctgggtccgcgagcaagggtgccctgaactgggggttgggggagcgcacaaatggc
ggctgttccgagcttgaatggaagacgcttgaaggcggggtgtgaggtcgttgaacaagggtggggggcatggtggg
cggcaagaaccaaggcttgaaggccttcgctaagcgggaaagctcttattcgggtgagatgggctggggcaccatctg
gggacctgacgtgaagttgtcactgactggagaactcgggttgcgtctggttgcggggcgggcagttatgcggtgcc
gttgggcagtgacccgtaccttgggagcgcgcgcctcgtcgtcgtgacgtcaccgttctgttggcttataatgcagg
gtggggccacctgccggtagggtgtcggtaggcttctccgtcgcaggacgcagggttcgggctagggtaggctctcct
gaatcgacaggcgccggacctctggtgaggggagggataagtgaaggcgtcagtttcttggctggtttatgtacatcttc
ttaagtagctgaagctccggtttgaactatgcgtcgggggtggcgagtgtgtttgtgaagtttttaggcacctttgaaatgt
aatcatttgggtcaatatgtaatttcagtgttagactagtaaattgtccgctaattctggccgtttttggctttttgttagacgaa
gcttgggctgcaggaattcggggcgccagctccggcgggcagggggggcgtggagcgcagcgcagcgcagcc
ccatcagtcgcaaaagcggaccgagctggaagtcgagcgtccgcgggagggcgggcgatgggggcaggtgccacc
ggccgcgcatggagggcgccgcgcctgctgctgttgcgttctgggggtgtcccttggaggtgccaaggagggcatgcc
ccacaggcctgtacacacacagcgggtgagtgctgcaaagcctgcaacctggggcgagggtgtggccagccttgtggagc
caaccagaccgtgtgtgagccctgcctggacagcgtgacgttctccgacgtggtgagcgcgaccgagccgtgcaagccg
tgcaccgagtgctggtgggctccagagcatgtcggcgccgtgcgtggagggcgacgacgccgtgtgccgtgcgcctac
ggctactaccaggatgagacgactggcgctgcgagggcgtccgcgtgtgcgagggggctcgggcctcgtgttctcct
gccaggacaagcagaacaccgtgtgcgaggagtgccccgacggcacgtattccgacgagggccaaccacgtggacccg
tgcctgccctgcaccgtgtgcgaggacaccgagcgccagctccgcgagtgacacgctggggcgacgccgagtgcca

Fig. 11b (3 of 3)

ggagatccctggcgttggttacacgggtccacacccccagagggctcggacagcacagccccagcaccaggagcc
tgaggcacctccagaacaagacctcatagccagcacgggtggcaggtgtggtgaccacagtgtatgggcagctcccagccc
gtggtgacccgaggcaccaccgacaacctcatccctgtctattgtccatcctggctgctgtggtgtggccttggccta
catagccttcaagaggtggaacagggggatcctctagagtcgagtcgacaaatcaacctctggattacaaaatttg
tgaaagattgactggtattcttaactatgttgctcctttacgctatgtggatacgtgctttaatgcctttgatcatgctattgcttc
ccgtatggcttcatcttctccttctgtataaatcctgggtgctgtctctttatgaggagttgtggccggtgtcaggcaacgtgg
cgtggtgtgactgtgttgctgacgcaacccccactgggtggggcattgccaccacctgtcagctcctttccgggactttcg
ctttccccctccctattgccacggcggaactcatcgccgctgcttggccgctgctggacaggggctcggctgttgggca
ctgacaattccgtggtgtgtcggggaagctgacgtcctttccatggctgctcgcctgtgttggccacctggattctgcgcggg
acgtccttctgctacgtcccttcggccctcaatccagcggaccttcttcccgcggcctgctgccggctcgcggcctctcc
gcgtcttcgccttcgccctcagacgagtcggatctcctttggccgctccccgcctggaattcgagctcggtaaccttaag
accaatgacttacaaggcagctgtagatcttagccactttttaaagaaaaggggggactggaagggctaattcactccaa
cgaagacaagatctgcttttgcttgactgggtctctctggttagaccagatctgagcctgggagctctctggctaactaggg
aaccactgcttaagcctcaataaagcttgccttgagtgttcaagtagtgtgtgccgtctgtgtgtgactctggttaactaga
gatccctcagacccttttagtcagtgtgaaaatctctagcagtagtagttcatgtcatcttattattcagtattataacttgcaa
gaaatgaatatcagagagtgaaggaacttgttattgcagcttataatggttacaataaagcaatagcatcacaaatttcac
aaataaagcattttttcactgcattctagtgtgtgttgccttgccttcaatcaatgtatcttatcatgtctggctctagctatccgcc
cctaactccgccagttccgccattctccgcccatggctgactaatttttttatttatgcagaggccgagggccgctcggc
ctctgagctattccagaagtagtgaggaggcctttttggaggcctaggccttttgcgtcagacgtacccaattcgcctatagt
gagtcgtattacgcgcgctcactggccgtcgtttacaacgtcgtgactgggaaaacctggcgttacccaacttaatcgct
tgcagcacatcccccttccagctggcgtaatagcgaagaggcccgaccgatcgcccttccaaacagtgcgcagcc
tgaatggcgaatggcgcgacgcgccctgtagcggcgcttaagcgcggcggtgtgtgtgtgtacgcgcagcgtgaccg
ctacacttgcagcgccctagcggcgctccttctgcttcttcccttctcgcacgttcgccggcttccccgtcaagc
tctaaatcgggggctcccttttaggggtccgatttagtgccttacggcacctcgaccccaaaaaacttgattagggtgatggttc
acgtagtgggcatcgcctgatagacgggttttgcctttgacgttggagtccacgttctttaaagtggactcttgttcaa
actggaacaacactcaaccctatctcggctctattctttgattataagggaatttggcgatttcggcctattgggtaaaaaatgag
ctgatttaacaaaaatttaacgcgaatttaacaaaaatattaacgtttacaatttc

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☒ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.